

STUDIES ON CERAMICS

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STUDIES ON CERAMICS

Proyek Penelitian Purbakala Jakarta
Departemen P dan K

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**Proyek Penelitian Purbakala Jakarta
Departemen P dan K**

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FOREWORD

The Ceramics Seminar, held in Jakarta from 3–7 September 1979 was the first of its kind in Indonesia. It was attended by specialists from Indonesian Institutes, the Ceramic Society and by scholars from abroad. Present were participants from the University of the Philippines, the University of Hawaii, the Chinese University of Hongkong, the National Museum of Singapore and the Muzium Negara of Malaysia.

Ceramics, namely the "local ceramics" or earthenware and the "foreign ceramics" are found on nearly every archaeological site, classical or prehistoric. Foreign ceramics found on sites are considered to be of great importance for the dating of the sites. As research on ceramics is still rare in Indonesia, it is hoped that by holding this kind of seminar several problems can be tackled together.

The Board of Editors has taken the liberty to edit the papers for technical reasons by carrying out some alterations and abbreviations. It is hoped that this publication will be useful for archaeologists and in particular for those who specialize in the study of ceramics and earthenware.

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IDENTIFICATION OF TOPONYMS FROM CHINESE SOURCES IN RELATION TO CHINESE CERAMICS FINDS

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Introduction

Toponyms of towns and countries in the Indonesian Archipelago have for centuries been a subject of much dispute. Scholars tried to locate ancient ports, by reading the Chinese records, by using geographical, geological or linguistic reasoning. At present however, more interest is paid to datable objects other than ancient monuments or inscriptions and statues, namely ceramic sherds. Ceramic objects found on the surface or used as heirlooms have long been an object of study. However, as ceramics, just as bronzes are easily movable goods, one does not know their date of arrival from China. For example a T'ang jarlet could have been obtained in the 19th century through dealers, or a Sung vase could be dug up from the grounds of a compound formerly owned by a collector.

It is different of course if these ceramic objects are found in great numbers on the same spot. We then think of ancient settlements. Archaeological studies formerly pre-occupied with the religious activities of kings are nowadays more focussed on the life of the people, their artifacts, the ways indigenous and foreign ceramics are used etc.

Sumatra

Trying to locate ancient ports or capitals, the toponyms of which appeared in Chinese records have since recently become a challenge for the archaeologists. The location of Srivijaya for example is a case in point. Diggings carried out in 1973 and 1974 led to the conclusion that the absence of Chinese porcelain sherds in the Palembang area, meant that it was not the site of the ancient capital (Bronson, 1974).

In a previous paper (Hongkong, 1978) I suggested that the absence of ceramic sherds does not yet mean the absence of an ancient settlement, as in the 7th century there was no use of Chinese ceramics, especially not by the ordinary man or by monks. They might have used bamboo, banana-leaves, wooden bowls, coconut husks, shells etc. for their crockery as one still can observe at present in many parts of Indonesia. I-ching appealed to his fellow monks to study first in Che — li — fo — che (Srivijaya) before sailing to India where they could learn Sanskrit and the rules for Buddhist monks, which were exactly the same as in Madhyadesa (India). Most of the monks who stayed in Srivijaya could have been Indonesians. As Bosch pointed out in 1952 student monks from Indonesia

went to India not only for religious purposes but also to study architecture and sculpture. They returned to Indonesia with their newly acquired knowledge and silpasastras.

Java

The first time Java (Ye-p'o-ti) was mentioned in a Chinese source was in the 5th century when the Chinese pilgrim Fa-Hsien landed there, as his ship had been blown off the normal route after it had left Srilanka. Thus Fa-Hsien could not have sailed through Strait Malacca as this was the normal route and besides, Fa Hsien was talking about a frightful bottomless sea which could not be the Straits, as even in those days, there were already ships, and the sea was so shallow in certain parts that foreign navigators were forced to make use of local pilots. Also for the sake of security of course otherwise they would be attacked by seagypsies who considered these waters as their property.

Some scholars think that there was no route between Sumatra and West Java in ancient times as geologically these two islands were still connected between Banten and Lampung. But ships are not necessary sailing from Srilangka or Tamralipti to China. It is acceptable that a ship coming from an Indian port stopped at an Indonesian port or Kedah, where the passengers had to embark on another ship. For example I-ching on his return from India, after having left Tamralipti, reached Kedah, which was already property of Srivijaya. There he had to wait several months for a ship coming from Srivijaya which had to bring him to Malayu and then Srivijaya. Fa Hsien could have stopped at a port in Banten or Lampung, crossed an isthmus and boarded another ship.

Thus foreigners had to board ships owned by Indonesian kings or seagypsies which was much safer as they were under their protection. In one Arab record of a much later date than I-Tsing's records it was said that foreign ships had to touch the port of Sriwijaya, if not, ships would come out to sea and attack them. Thus the straits of Malacca was not open sea but considered as a kind of chanel owned by the kings of Sumatra and the Malay Peninsula. Thus Fa Hsien could not have sailed through the straits of Malacca, for his ships would have been attacked and steered to some port in the straits. Ye-p'o-ti was inhabited by Brahmins and heretic Brahmins, (Pasupatas, the non-orthodox Hindus who spread Hinduism to a non-Indian populations) but the Buddhist Dharma was not yet worth mentioning, according to Fa-Hsien. On his way to China he mentioned the other passengers many of which were "Brahmins". (Wolters, 1977, on Pasupatas). He might have meant Indonesian Hindus, as in the fifth century there were already Indonesian Hindu kings in Kutai (Eastern Kalimantan) and in West Java. Fa-Hsien might

have been in a port on the westernmost part of the kingdom of Tarumanagara, which spread over Karawang, Jakarta, Botor and Banten. Karawang has the Ci Tarum (River Tarum) and the other places have Purnawarman's (Tarumanagara's king's) inscriptions.

Ko-ying, which Pelliot (1904) located in Java was placed in Sumatra by Wolters who now thinks that Ko-ying represents Ka(ra) wang as Romano-Indian rouletted pottery was found in Buni east of Jakarta (Walker and Santoso, 1977). It is very likely indeed that West Java was already an important area since the Neolithic period, as we find most of the neolithic workshops in West Java, indicating a dense population in the Neolithic period. Numerous neolithic earthenware pots were found in West Java.

Ho-ling was formerly thought to be Kalinqqa. Thus in the past there was the theory that the early Hindu "colonists" came from Kalingga (now Orissa state). Damais however holds that Ho-ling represents Walaing (1963) However Walaing was mentioned only twice in ninth century inscriptions, whereas Ho-ling was mentioned earlier. Wolters places Ho-ling also in West Java (1967) I suggested: why not read it as Waringin, as it is a common name in Indonesia. There was the Caringin area in western Banten (ca=ba) and there is a place called Jatiwaringin east of Jakarta. In the Buni area there is Kedungringin and in Kalimantan there was Kota Waringin.

Ho-lo-tan which Wolters also places in West Java could not be identified yet. But I venture to read it as Ciaruteun the river in Bogor where a Purnawarman inscription is still lying Ci (cai) is river in Sundanese and as Ca can interchange with wa, this Ci or cai is like the way for water in South Sumatra, the eastern part of Indonesia and even up to Hawaii. Aruteun means that which is to be drunk, but there is also a place called Cirotan.

In the T'ang annals it was written that the king of Ho-ling lives in Chö-P'ö but his ancestor Ki-yen moved his capital to the east, to Po-lukia-sze. Pelliot (1904) read it as Waruh-gresik, Waruh of the beach. This led to theories that after Sanjaya's inscription was made on the Gunung Wukir, the Sanjayas moved to East Java around 742, as they were pushed back by the Sailendras. However, Waru need not be in East Java especially not near Malang, near which the Dinoyo inscription was found, as there is a Waru in Central Java which was on the beach and where ancient ceramic sherds were found (Suleiman, 1978). Even the location of Chö-p'ö had been disputed in the past. Some scholars thought it to be in Sumatra or the Malay Peninsula. But the find of many T'ang sherds in the Prambanan arca could indicate the contacts with China in the 9th century.

This must be around 873 as the last mission from Chö-p'ó was recorded to arrive in China in that year.

This is also an indication that the royal Palace was indeed in the Prambanan area and also that the Sailendra kingdom (and Mataram) was not a mere "agrarian kingdom" by contrast with Srivijaya which was regarded by scholars as a "maritime kingdom". I asked in my Hongkong paper (1978): 'how could the Sailendra kings be so wealthy as to build the Borobudur and other monuments without the revenues of the seaborne trade, carried out by the people on the northern coast of Central Java?' Thus the T'ang sherds were brought there by Indonesian missions or Chinese sea captains, though still sporadic for the development of trade and merchant fleets only started during the southern Sung, thus not before the 11th century. Besides on the lists of foreign settlers called the Warga Kilalan of the 9th and 11th century there were Indians and Mainland Southeast Asians but no Chinese. Chinese settlers came only during the 12th century, starting China towns called Kota Cina or Pacinan., whereas other settlements were called the Kampung Koja and when there were Buginese it were the Kampung Bugis.

Sung sherds are found on the north coast of Central Java and in Eastern Java and a prominence of Yuan sherds in Eastern Java. This can be connected with Kubilai Khan's efforts to be recognized as the suzerain of the King of Java, his contemporary and fellow tantrist, Kertanagara. We know the story of the Ambassador Meng-ki who was returned to his master with a mutilated face by Kertanagara and the sending of a fleet to Eastern Java by Kubilai Khan.

We may conclude that as Central and Eastern Java are concerned, it is not difficult to connect the ancient toponyms with the finds of Chinese ceramic sherds. It is a different case with toponyms in other Indonesian islands.

Sulawesi, Moluccas

The archaeologist's interest was focussed on countries where Hindu and Buddhist monuments were found. Thus one gets the impression that other countries or islands played a minor role in Indonesian history.

For example Lo-cha was supposed to represent raksasa, or the Moluccas, as the people were described as fierce people. But the same was said about the Kun-lun people who were wild, fierce, even black but excellent sailors. Kun-lun is even regarded as to represent anything Malay (or shall we say the inhabitants of island Southeast Asia). It appears that navigation and trade was dependent on the role of those fierce Kun-lun sailors. When Cambodia was raided around 770, there was talk of the people of Java but also of Kun-lun people. It might be that Javanese

commanders made use of Kun-lun people who were Orang Laut occupying the seas around Sumatra and the Malay Peninsula.

However, it is possible that also people from southern Sulawesi belonged to the Kun-lun group.

In southern Sulawesi plenty of ceramics have been found. Chinese ceramics were used for household utensils, for ceremonies but also for the dead (Hadimoeljono 1978). Van Heekeren (1958) mentions a report by Van Vuuren in 1912 that at Bukaka, a ceramic pot was buried in the soil. It was said to contain the ashes of a king of Bone, named Tamupaga. Not far from there was another funeral pot containing the ashes of the third king of *Bone* who ascended the throne in 1398. The custom of cremating of kings was also mentioned in the chronicle of Wajo (Noorduyn, 1955), a king was cremated on top of his shields and afterwards his ashes were put in a Chinese ceramic pot (*guci*). Hadimoeljono (1978) mentions another king of Bone who got the posthumous name of "he who rests in a pot".

Ordinary people, but wealthy, were buried with Chinese porcelain. This is evident in southern Sulawesi where numerous graves were often illegally excavated for the Chinese ceramics. A systematic excavation in Takalar by Uka Tjandrasmita in 1975 brought to light several, though not so large ceramics, in graves which proved that ceramics were funeral gifts. Ceramics were status symbol there as in other parts of Indonesia. Thus people were buried with imported ceramics.

Orsoy de Flines made a research of ceramics and sherds in 1946. In Bone were bowls, boxes and dishes from the 14th – 15th century. A pot from Fu-Kien contained calcified bones of the 16th century. In Watampone, the porcelain was from Lun-chuan, Te-Hua, Ying Ching and Chou-t'ou of the 14th and 15th century. There were even older potsherds in Southern Sulawesi. The toponym Pu-ni could have represented the name Bone, a kingdom in southern Sulawesi.

Brunai or Boni ?

Groeneveldt (1876) always regards Pu-ni as Brunai on the Northwestern coast or Borneo. However on p. 102, quoting from the Tung Hsi Yang Kau (1618) book V, he mentions *Bun-lai*, which he also regards as Brunai, while the Chinese characters are different from those used to denote Pu-ni (p. 110).

"Bun-lai is the same as Po-lo; it is the last land of the eastern ocean and the beginning of the western sea. It sent envoys in 669 and 1406." Then follows the information that the present king is a man from Fukien who followed Cheng Ho when he went to this country and who settled

there, for this reason there is a stone with a Chinese inscription near the king's palace.

The information that the people are not allowed to eat pork indicates that they are Muslims. Yet it is followed by another information that there is a temple in this country in which three men are worshipped as deities. Among the people there are also pirates, the Mau-su. Syariffudin (1978), mentions the grave of a Chinese muslim dated 1264 AD in Brunei.

Pu-ni is mentioned in the History of the Sung dynasty (960–1279) Book 489.

"This country is situated in the southwestern sea; its distance from Java is 45 days, from San-bo-tsai (Palembang) 40 days and from Champa 30 days, in all cases the wind to be fair".

The first mission to China was in 977, the envoys bringing camphor, camphor-wood, tortoise shells, sandal-wood and elephant-tusks.

They brought a letter from their king Hiang-ta. "The letter was enclosed in different small bags, which were sealed, and it was not written on Chinese paper, but on what looked like very thin bark of a tree, it was glossy slightly green, several feet long and somewhat broader than one inch, and rolled up so tightly that it could be taken within the hand. The characters in which it was written were small and had to be read horizontally". Were these perhaps the lontara of the Buginese?

Pu-ni is also mentioned in the History of the Ming dynasty (1368–1643) Book 325. (Groeneveldt, p. 110).

Here one gets the impression that *Pu-ni* was near Java: "In the 8th month of the year 1370 the Emperor sent two officers to go abroad as envoys; they left Ch'uan-chou in a ship, arrived at Java after half a year and in a month more they came to this country".

Afterwards follows the information: that the country had hitherto belonged to Java. The Chinese envoys succeeded in convincing the king to send a mission to China. The king sent envoys bringing a letter, crane crests, living tortoises, peacocks, camphor bars, cloth from the west and incense, they came the 8th month of the following year with the Chinese envoys.

There was again a mission in 1405 sent by king Maraja Ka-la. There were more missions in 1408, 1412, 1415, 1425, even in 1530. A king of *Pu-ni* died in the Wan-li period (1573–1619), there was a war in the country at last all the competitors were killed and the daughter of the late king was put on the throne. Then there was an information about a man of Fu-kein named Chang who had been made a "datu" in that country.

Though the country did not bring any more tribute, the intercourse by traders was uninterrupted. "The country consists of fourteen different places and is situated at the east of Palembang".

Grace Wong mentions, that after some harbours in the Philippines, and Sulu follows Pu-ni before the Moluccas. On p. 57 Grace Wong (1978) reads Dong- Chong ju- la as Tanjung Pura in Borneo, but I prefer Donggala, a harbour on the west coast of Central Sulawesi, before Pu-ni.

Why should ships which reached Su-lu sail westwards to Brunai before proceeding to the Moluccas ?. Would it be not more logical that they sailed on to Bone on the east coast of the southern peninsula (left leg) or Sulawesi which is already near the Moluccas ?.

One reason to identify Pu-ni as Brunai is delivery of camphor to China. But delivery of certain products does not mean that these products were from the country itself, for countries which were entrepôts like for example Sriwijaya, brought commodities to China from all over the Indonesian Archipelago and even countries in the West.

Religious evidence

Pangeran Syariffudin of Brunai (1978), who regards Pu-ni as Brunai, states that Brunai became a Moslem sultanate in the 12 th century. The information on *Bun-lai* in the Tung-Hsi Yang K'au Book V, that the people were forbidden to eat pork, suits this.

If Pu-ni or Boni was Bone in Sulawesi, it became a Moslem country very late, namely in the beginning of the 17th century.

Chau Ju kua mentions besides a description of the king and his encourage and his possession of a hundred warships, also that the godhead consists out of two pearls in a building of a few stories (a temple ?). Wang-Ta-Yuen, writing in 1349 on Pu-ni mentions that people worship Buddha statues, are polite to the Chinese, and are skilfull in arithmetic and accounting. (Krom, 1931).

Before Islam entered Southern Sulawesi, what was the religion of the people ?. I found in the Beknopte Encyclopaedie van Nederlandsch Indie: p. (1921) p. 70 under "Boegineezen" (namely the Buginese ethnic group to which also the people of Boni belong): "they worshipped many spirits, called dewata, served by the Bissu (priests), and the Sangiyang, amongst whom Sangiyang Saerri the spirit of the rice enjoys the particular worship. The chief of spirits is Batara Guru (Siva). They also worship Karaeing-lowe (The Great Lord)".

One gets the impression that they had a typical Indonesian religion as in West Java, with a blend of names taken from Hindú religion; they

probably got to know from Java: dewata, Bhatara Guru. The kings were called Bhatara, like in Majapahit (Noorduyn, 1955).

Trade routes

Another reason for us to locate Pu-ni (spelled as Boni by Grace Wong, 1978), in Southern Sulawesi is that it was on the "Eastern route" of the blue and white Ming ceramics.

The trade in spices and aromatic products from the Moluccas and the lesser Sunda islands had been thriving through the ages. It was either Srivijaya or Java which sent envoys, bringing these commodities to China before the reign of the southern Sung. The Indonesian envoys came on Indonesian ships. It was only during the southern Sung period that Chinese trade and navigation were fully developed (Wolters, 1967; Hall, 1970). There were Chinese ships sailing to Indonesian ports but sporadically, like for example when for the first time after an absence of a century a mission from Java arrived in China in 992. The group came along with a Chinese merchant on a Chinese ship.

Chinese visited the Archipelago, but they did not yet settle there, as we mentioned above.

After the development of Chinese navigation and trade during the southern Sung period, Chinese ships went to the Archipelago via the eastern route, and direct to the spice and aromatic islands in eastern and southeastern part of Indonesia. This might have caused the weakening of Srivijaya for the Chinese were no longer dependent on the "tributary trade" from that part of the Archipelago now that they could get these commodities and camphor from other sources. The information that the Chinese emperor sent envoys to Bo-ni via Java is very significant, for they might not have been allowed to visit Bo-ni without the permission from Java, to which it belonged. The information that the raiders from Sulu left Puni (Boni) only after the appearance of Javanese troops indicates the role of the Javanese in Boni which was near the Moluccas and not Brunai which was too far from the spice trade.

Grace Wong, in her article on blue- and white porcelain, mentions on p. 68: the searoutes in the Tao-I-Choh-Lueh Dao-Yi Zhi Lue and the Dong Xi Yang Kao:

"the eastern sea route would begin from Taiwan and Luzon, and would cover the Sulu Sea and Sulawesi, to reach the Moluccas and return via the eastern coast of Borneo". The western sea route would begin from Fukien and would cover Vietnam, Peninsular Malaysia, Sumatra, Java, Bali and Timor, and would return via the southwest and western coast of Borneo".

Thus we may conclude that Brunai was on the *western* route and had nothing to do with the spice trade. The first mission from Java (ruled by Dharmawangsa Tguh) visited China in 992 AD. It is possible that Chinese captains started sailing to the eastern part of the Archipelago to lure the Indonesians to China instead of bringing commodities to Srivijaya which sent missions via the western route.

The Seafaring Buginese of southern Sulawesi

In Indonesian history the Buginese of southern Sulawesi played a very important role. The royal dynasties in the Riau, Aceh and Malaysia were Bugis in origin. At home they had agriculture, trade but also navigation. The men were encouraged to cross the seas. Like the Orang Laut around Sumatra, they must have played an important role near Java and in the eastern part of the Archipelago. They might have been present in Mataram, Central Java of the 9th century. Stutterheim (1933), noticed the similarity in titles of Javanese princes and those from southern Sulawesi. Boni might have been the center of Buginese activities at least in the 13th – 14 century. They wrote lontaras (manuscripts) comprising diaries, administrative reports and genealogies which is an indication of a sophisticated society with a tradition of writing.

Being traders, they were good at arithmetic and accounting which suits the data in the writings of Wang-Ta-Yuen, besides the mentioning of the 100 warships owned by the king. There was the spirit of adventure, besides settling down on other Indonesian islands, Buginese even settled on the north coast of Australia.

Similar to the situation in Srivijaya where the power was supported by the Orang Laut in the Straits of Malacca, the Javanese kings might have been dependent on the seafaring people of Sulawesi, namely the Buginese. I suggested in a previous paper (1978) that Srivijaya and Java were always struggling for hegemony in the seas. Their missions to China never overlapped (Wolters, 1967).

When the Sailendras were ousted from Java around 856, the Buginese remained faithful to them, when they were reigning Sumatra and the Malay Peninsula. The Buginese could together with the princes of the harbours of northern Central Java, cut off the trade from the interior to the sea. This might be one of the reasons that the kings of Mataram had to shift their center of power to East Java in the first half of the 10th century, especially after the eruption of the Merapi which buried the capital and the road to the northcoast (about the shift see Boechari, 1977).

Thus the spices and aromatic products were brought by the Buginese sailors from the Moluccas and the lesser Sunda islands to Sri-vijaya. This was no longer necessary after the Chinese sailed the eastern route. Thus again the first embassy of 977 and the mission of Chinese to Bo-ni might be seen in the light of the active role of the Buginese in the spice trade.

It is for this reason that I propose to read Pu-ni (Bo-ni) as Bone and not Brunei, because of the role of Bone in the trade in spices and aromatic products.

Conclusions:

1. Pu-ni (Boni) might have been Bone (Boni) because of:
 - a. its association with Java
 - b. the finds of porcelain sherds in Boni
 - c. its nearness to the Moluccas and the sandalwood-islands
 - d. its worship of statues according to Chau-Ju Kua suits Bone more than Brunai which had already adopted Islam in the 12th century
2. Extensive excavations have to be started in the Bone area, in the near future to search for more evidences on the eastern trade route.
3. The reading of Indonesian toponyms spelled in the Chinese way needs revision, as until now stress had been laid on "Hinduized" countries, whereas countries without Hindu and Buddhist monuments were overlooked, though they might have played an important role because of the trade in spices and aromatic products.

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THE CLASSIFICATION OF POTTERY FROM GILIMANUK, BALI

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Gilimanuk is situated on the western end of Bali island, with a wide beach located in the southern part of Gilimanuk Bay. It is surrounded by Mount Prapatagung in the north, the mountainous area on the east and Bali Strait on the west. The vast area of Gilimanuk is formed by five stages of beach-ridges (Verstappen, 1975, fig. 11, Soejono, 1977; 281). The first beach-ridge is the oldest one while the fifth being the youngest.

The site being the object of archaeological research, is located between the first and the second beach-ridge. The area was formed by a plain with an altitude of 5 metres above sealevel, sloping east and westwards. Some parts are used for tomato-, sweet potato-, cassave-, corn-, and peanut cultivation. The soil on the beach area often suffers from erosion and stagnant water, especially at high tide.

The continuous erosion caused cracks and fissures, exposing fragments of human or animal bones, potsherds, fragments of bronze, beads, metal etc. Those finds indicate the presence of remains of human activities in the past. In 1962 a trial excavation was carried out on the northern part of the plain resulting in an assumption that the site of Gilimanuk forms a remains of human habitation dating from the metal age.

A series of systematic excavations were later on conducted to strengthen this assumption, namely in 1963, 1964, 1973. An area of 137,5 m², comprising 22 boxes of 2,5 x 2,5 m each was dug out. Stratigraphy on the site show four layers which appeared consistently throughout the excavated area with the following specification (Soejono, 1977 : 177 - 179).

Layer-1 : Black humus, disturbed at several places by human activities. This layer contained rubbish from recent times. Potsherds and shells from lower levels appeared at disturbed sections. The average thickness of this layer is about 20 cm.

Layer-2 : Yellow-grey fine grained soil. The lower part contained potsherds and shells, indicating a gradual transition into the following layer. *). This layer has an average thickness of ca 15 cm.

*) Skeletons of pigs were recovered in several sectors (boxes).

Layer—3 : Light to dark brown composition of clay and sand in which remnants are discernible, consisting of a high quantity of potsherds and shells, some well preserved vessels, pieces of ornaments and fragments of metal objects. Other substances were skeletal fragments of pigs, fowl and fish. Human skeletons only came up in some sectors. This layer has a thickness between 40 cm to 115 cm.

Layer—4 : Light grey sand. Most of the human burials; provided with gifts were revealed in the upper level of this layer, usually at a depth of ca. 75 cm from the previous level.

Remains of human activities are concentrated in the third layer. Nearly all of them are found in fragmentary condition, only a small number of isolated earthenware pottery and some small beads of glass and shell are in a good state. Funeral goods, made of bronze, iron, gold, glass, shell and baked clay, from the sand layer are usually well preserved (Soejono, 1977 ; 178 — 180).

Research on the cultural elements found at Gilimanuk is still to be continued with the expectation of obtaining more evidence to complete the present data. It would be too early to classify the sherds from Gilimanuk as one of the cultural elements found at the site. As a preliminary analysis for the moment, I shall restrict this writing to the classification of Gilimanuk sherds according to the data available at present. Though this classification is meant to be a temporary one which can be revised by more recent data.

Pottery found at Gilimanuk consists of pots, bowls, pitchers, jars, plates and lids. Most common are the pots with various shapes or types.

Pots form the dominant feature among the pottery at Gilimanuk. They are of various sizes. Three categories were observed after classification on their size, viz. small, medium and large pots. Generally, these pots can be put into two divisions namely globular and carinated pots. Pottery of the former type has a medium sized mouth, with a globular body and round bottom, and no spout. The globular shape varies from spherical to ellipsoid and egg-shaped. This kind of pottery, though simple, has a large content. As sub-type of this category are to be mentioned a. 1 : globular pot with straight neck, a.2 : globular pot with convex neck, and variant of a.2, i.e. with convex neck and foot (a2 — 1). The globular shape of body and bottom is spherical whereas the rim is very simple. This kind of container is very simple but solid and has a large content. Sub-type a. 2 have a convex neck with a special rim. Contour of the body and bottom follows the pattern of an ellipsoid. The pots are mostly of big size so that they can

contain much. The most special form among the globular pots is shown by a pot with a convex neck and foot (outflared). The upper part of the body is decorated by a wavy band of clay. This type of pots also form special containers with a large content.

Carinated pots are represented only by type (ap) and sub-type (ap 1). Type (ap) : Profile of the upper part of body shows a straight line, while downwards it is globular. The upper part form an angle with the lower part. These pots with medium sized mouth seem to have a rather large content, but its variety and number is limited. Subtypes of these carinated pots are pots with angled neck (out-flared mouth).

Other forms of Gilimanuk pottery with complex shape or type are the bowls. Though not numerous, they show much variety. Similar to pots, bowls generally can be put into two categories, namely the round and carinated bowls. The round bowls have several sub-types and are varied, viz. bowls of which the contour of body and bottom is hyperbolic. The round shape of body follows the pattern of an ellipsoid and a cylindrical, whereas the contours shows a divergent (unrestricted), and vertical line. Bowls of this kind have various shape and size but can contain very little. Sub-types of type (b) are shown among others by a round bowl with a flat bottom (b.1), a round and high footed bowl (b.2) and its variant : a bowl with a round serrated body with foot (b.2-1). A special form is shown by the sub-type (b2) : a round bowl with high outflared mouth of small size.

The variant (b.2 - 1) is somewhat different with respect to the inner space, which is continued down to the foot part, while the base of the foot is flat and massive.

Other bowls are the carinated bowls of type (bp) and subtype (bp.1). Two kinds of shoulders are observed, a round and sharp angled shoulder. They usually have a rather high body, (compared to the round bowls) and widening mouth, so it looks bigger, with a large capacity.

Bowls of subtype (bp.1) have usually a rounded shoulder, a rather high body and flat bottom. With this kind of shape added by incised decoration on the body, bowls of this type look bigger.

Other kinds of pottery from Gilimanuk are very few in number and as well as in variety among others : kendi (pitchers) jars, plates and lids. Pitchers are classified as type (c) with subtype (c.1). Type (c) has a globular body with a slender neck, narrowing mouth and a spout on the upper part of body. Decoration was made by incised wavy and straight lines. They are very few in number. Type (c.1) has a similar shape, but with still smaller mouth and longer neck and no spout. Judging from their shape, these pots are special with a large capacity.

Pottery of big size, as compared to other kinds of pottery are those of type (d) or better known as "jars". These jars have only one shape : globular, wide mouthed and thick walled. With these characteristics, the jars are very solid, with a large content.

Dishes or plates are also only of one shape, namely type (b). These are shallow bowls with round bottom.

Other kinds of few types are the lids (type t a). These are mostly small sized shallow bowls with a knob sprouting centre of the inner bottom, which are used as handle. Based upon their size they were assumed to be lids of medium sized pots.

Decoration. Some of these Gilimanuk pottery are decorated. They consist of many patterns, such as, lines, knot—, fish bone—, geometric—, scallop flower and wavy band pattern etc. Techniques of decoration are : impressed, incised and applied (applique). Impressed technique gave lines—, fish bone—, geometric, flower design and other: while with the technique of application, wavy bands were usually obtained. The net design is most common among the Gilimanuk pottery. This design shows the straight and slanting rectangulars formed by crossed lines impressed on the body and bottom of pottery.

Pottery of type *a*, some bowls of type *b*, type *bp* and jars of type *d* are decorated with this design. Contrary to this net designs, scallop designs are very rarely found on Gilimanuk pottery, namely only on the type *ap 1*. This kind of decoration is mostly done on the edge of carination.

Line design is also common, consisting of short, straight—, slanting—, crossing—, curving and wavy lines. This kind of design is incised on several parts of the pottery, like on the body, shoulders, neck, rim, and the inner surface, and are represented by pottery of type *c*, type *bp*, sub type *bp 1* and some potsherds.

Incised fish bone is very scarce on Gilimanuk Pottery. It is found on the body below the rim as shown on one of the sherds. Flower design is pictured on sherd GLM S XIII/165 and geometric design is consisting of triangle, diamond and others form interesting decoration.

Decoration obtained by application technique are the wavy band made of clay encircling the body, as shown by pottery of variant *a 2 - 1* and some potsherds.

Colour. Colour of pottery is usually obtained in two ways. Firstly by chemical reaction of clay, air, temperature and length of firing, Secondly by changes caused traces of usage, such as sooth, colouring, chemical reaction of surrounding soil and erosion etc (Shepard, 1965 : 103).

In general, Gilimanuk brown and black coloured pottery are also present. The brown colour of Gilimanuk pottery is the basic colour obtained by firing. Its is most dominant among other Gilimanuk pottery, almost all types are of this colour, except some types of pots, foot bowls and pitchers. It varies from lightbrown, yellowish brown to dark brown, though not very clear because of later changes.

Red colour pottery are few, consisting as some globular pots. Footed bowls, pitchers of type *c* and subtype *c 1* and some sherds. This red colour is obtained by slipping on the outer surface. Slipping is meant for decoration and consolidation (Shepard, 1965 : 67 – 69).

The black colour is found on the sherd, possibly caused by carbonization during use.

TABLE 1 CLASSIFICATION OF GILIMANUK POTTERY

Shape	Type	Sub type	Variant
Globular	(a) = pot	(a 1) Straight necked	—
		(a 2) Convex necked	(a2-1)= footed
	(b) = bowl	(b 1) Flat bottomed	—
		(b 2) Footed	(b2-1)= serrated
	(c) = pitcher	(c 1) Unspouted	—
	(d) = jar	—	—
	(e) = plate	—	—
	(ta) = lid	—	—
Carinated	(ap) = pot	(ap 1) Slanting necked	—
	(bp) = bowl	(bp 1) Flat bottomed	—

TABLE 2 DECORATIVE PATTERNS ON GILIMANUK POTTERY

Specification	Pottery type	Sherd
Net	(a); (b); (bp); (d)	almost all sherds
Scallop	(ap 1)	—
Line	(c); (bp); (bp 1)	some sherds
Fish bone	—	some sherds
Flower	—	sherd GLM S XIII/165
Triangle	—	sherd TWSD 9
Diamond	—	sherd TWSD 9
Applique	—	sherd TWSD 1

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DECORATED POTTERY FROM THE SOUTH COAST OF JAVA BETWEEN PACITAN AND CILACAP

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I. Introduction

This paper is intended to present data regarding our archaeological findings specially that of pottery in sites located between Pacitan and Cilacap. For so long the south coast of Jawa has been neglected mainly because this area contains no large classical monuments. But the presence of pottery offers a rich evidence for us to reconstruct the history of this area and it is for this reason that I call attention to the study of pottery.

We know that pottery is one of mankind's most important cultural products and is one of the means whereby we can gain contact with the past. Human beings create pottery for fulfilling their daily needs, either for practical or for ceremonial purposes. Since pottery plays an important role in the social life of the past, they become a valuable source of data for reconstructing the social conditions in ancient times. Almost all of the archaeological sites in Indonesia have pottery or sherds which can be used as evidence about certain aspects of human life in previous eras.

Pottery of various types occupied an important position in the social life of the pre-historic period and this is also applicable to some extent to present-day conditions.

Pottery made in more recent times can be said to represent traditional culture that has been carried over from the old times with many forms and techniques still surviving until now. Many people use them as cooking vessels, as containers for liquids and for many other usages before plastic wares are substituted for pottery. We see this phenomenon already happening in the rural areas where pottery is being supplanted by plastic ware. I think that not too long in the future, pottery making which is still found in many places in Indonesia will diminish if not vanish because of the increasing predominance of plastic ware as well as of other products of modern technology. As an archaeologist however, I agree with my colleagues that pottery must be made to survive not only because it shows us how people made pottery in the old days, but the more remarkable reason is the fact that there are certain dishes which people today still prefer to cook in pottery. Rather than use other kinds of vessels, pottery is preferred since the flavor of such food only comes out well when cooked in earthenware. That is why

we carry out research on old pottery and encourage the expansion and further development of present pottery making. It is with due consideration of this problem that I try to present the result of our research on pottery along the south coast of Java between Pacitan and Cilacap.

Earlier research conducted by Van der Hoop has pointed out that along the limestone mountains in the south coast between Yogya and Pacitan there were many decorated sherds (Van der Hoop, 1938: 94-95). This information attracted my attention and I decided to survey the area. Later on, the area of investigation was expanded to include the area far to the west of Yogyakarta. The 15-day survey covered a distance of about 3.500 kms. This is only a preliminary survey where we have found some prehistoric sites.

Among the sites is Gunung Wingko which has been excavated. The Gunung Wingko finds resemble the decorated and undecorated sherds from other sites. The decorated pottery have impressed or incised patterns associated with other finds, e.g.: human skeletons, human bones, fragments of bracelets, rings made of bronze, iron fragments, beads, pottery, charcoal, tools and finery made of animal bone, etc. It is a pity that we still do not as yet have absolute dating for the charcoal and other finds.

The other sites along the south coast have not yet been excavated. The finds consisting of decorated and undecorated sherds are collected only from the surface and very few whole pottery have so far been found, except for *nyiru*, jugs and bowls which we were able to reconstruct from the available sherds.

The decorated pottery which we found do not resemble the present day pottery, so it is important to discuss this further in greater detail. If there are any similarities between the old and those of contemporary pottery, the places where the sherds were found and the places where contemporary wares are made are far apart.

We know that decoration requires special skills from the potters and sometimes can indicate the social environment including that of religious beliefs and values of people. Potters do not decorate their pots if they have no previous knowledge for fear of spoiling certain magical effects. However, not all decorations have a spiritual purpose. Still, decorations and other attributes of form made on the pot have an indirect purpose. For instance impressed design of basketry is the result of the process itself. When a basket is used as a foundation, its large bottom makes it possible to remove the moulded pot without it being broken.

II. The Sites

The archaeological survey along the south coast of Java was carried out in June, 1979 by the *Proyek Penelitian dan Penggalan Purbakala Yogyakarta* (The Project of Archaeological Research of Yogyakarta) wherein the writer acted as Team Leader. In this survey, we visited three provinces, that is East Java, Central Java and the Special Territory of Yogyakarta including eight regencies, e.g.: Pacitan, Wonogiri, Gunung Kidul, Bantul, Kulon Progo, Purworejo, Kebumen and Cilacap. Among the eight regency areas, we found four sites of pottery and prehistoric sites located in the regency of Gunung Kidul, Bantul, Purworejo and Kebumen. In the regency of Pacitan, Kulon Progo and Cilacap we did not find any decorated sherds on the surface. We found only undecorated ones but I do not have positive proof that the sherds are old. I received information from the inhabitants in the area that the sherds came from the people who made salt years ago, about the 19th century. Although our information collected from the people in the area would date the sherds to the 19th the century, nonetheless, I collected samples from each area.

Den Ombo Site

This site is situated very close to the seashore of Krakal, in the regency of Gunung Kidul, district of Tepus. The area is a plain which is not so large, about 2 kms. long and 0,5 km. wide. The site itself is about 1.500 x 500 meters. It is located along a row of limestone mountains. The local people call this area *Den Ombo*, in Javanese which means a plain with plenty of sand (*Den* is derived from the word *wedi* — sand, and *Ombo* which means plentiful, large or a great amount).

Here we found many undecorated sherds and just two pieces of decorated ones. According to the 60 year's old local guide who provided us with information about the area, the sherds which were spread all over the surface were already there when he was a child. The other finds which were spread over the surface were shells and animal bone fragments. The decorated sherds we found are unique, for among so many sherds there are only two which have this type of decoration namely: three small holes in a row, and the other consisting of a combination of impressed and corded design. No complete or whole pot has been found so far. At the moment with the limited information we have, we still do not know what must have been the function of the site. But based on sherds we collected so far, we can temporarily reconstruct the rim of the pot the diameter of which is about 24 cm. I believe that more decorated sherds and even whole pieces will be found in the future if intensive research will be undertaken.

Gunung Wingko

Gunung Wingko is the name of a sand dune which afterwards became the name of the village in the regency of Bantul, district of Sanden, Special Territory of Yogyakarta. There are two rows of sand dunes, which lie in east – west direction, both of them running parallel with the seashore. The sand dune where thousands of sherds are scattered lies in the north row. It is older than the sand dune in the southern part.

The site has been excavated five times and a geological survey has been done. Observing the results of the excavation, the site must have been used for burial and for settlement purposes. The finds consisted of some human skeletons and other fragments of human bones, showing evidence that it was a burial place. Pottery was used as a container of funeral gifts.

Traces of an old river were found in the geological survey. Stratigraphically, it shows that there are two periods of occupation and that the people moved from one place to the other within the same site at different times. They also lived on the bank of an old river which was flowing close to the sand dune. The decorated and plain pottery and sherds have been found in the excavation. There are two kinds of decorated sherds, that is impressed and incised with various types and patterns.

Wingko Sigromulyo Site

The site of Wingko Sigromulyo is situated about 10 Kms in the northern part of the coast. Wingko Sigromulyo is a name of the village, in the regency of Purworejo, district of Ngombol. The site lies in the village area and is disturbed. Many big trees have been planted in the area, and there are many houses and other structures of local inhabitants' and in the northern section there is a graveyard.

No whole pottery was found in this site, so it is difficult to tell what were the shapes of pottery in the area. But based on the sherds found on the surface they must have been made with paddle and anvil with various surface patterns and motifs.

Ayamputih Site

Ayamputih is the name of the village in the district of Buluspesantren, in the regency of Kebumen. The site lies about 2 Kms. on the northern part of the seashore. There are two rows of sand dunes and both run parallel with the seashore along the east – west direction. On the northern sand dune there are many sherds. We found ones that are decorated and others that are plain. The pattern of decoration looks like the ones found in Wingko Sigromulyo.

The Ayamputih site is also situated about 2 Kms. on the east bank of the Luk Ulo River. The sand dune where the sherds are found is a cultivated area. Compared to the Gunung Wingko site the Ayamputih site is not too large. The sherds with paddle mark pattern are still in good condition.

III. The Decorated Pottery

As we have mentioned above the only site where whole pottery was found is Gunung Wingko. It has many types and decorations but sometimes some of the sherds were plain. The jar is the dominant shape with relatively long neck and the rim is a bit flared. The body is not exactly spherical (Fig. 1: d – f).

Usually, the sherds were found associated with human skeletons. The jars have incised decorations on the shoulder or body, generally fish bone or net motif incised vertically or horizontally. Sometimes the same decoration is found on the body. As for the other types of pottery it is hard to tell their complete shape, but based on sherds they must be globular in shape.

A decorated bowl was found in complete shape, though broken when it was found. After reconstructing the vessel it turned out that the lower part of the body close to the bottom was incised with parallel lines (Fig. 1: h).

The unique shape from the Gunung Wingko pottery complex is the *tampah* (*nyiru* = winnow) type (winnowing tray), a round shallow vessel with a flat bottom (Fig. 1: g). The complete shape of this type of vessel has not been found, but its sherds come to as much as 95% of the total sherds collected. Based on the sherds we can more or less reconstruct the shape and measurement of the pottery. The small *tampah* type is 4,5 cm high, the diameter of the rim is 19 cm and the bottom is 25 cm in its diameter. The bigger shape of that type is 9 cm high, 80 cm in rim diameter and 84 cm for its diameter at the bottom.

This type of pottery has basketry decoration that is impressed design, there are motifs of *kepang*, *tikar* (mat), *kain* (cloth weaving) and even a combination of other motifs (Fig. 2: a – f). In the bottom surface of the vessel, there are traces of the inner grain of the trunk of the palm tree, which was used as an anvil in the process of making the vessel and the basket was used as a foundation.

The other site of pottery is not yet known for certain, because the sherds are so tiny, so as to create difficulty in imagining what their original shapes could have been.

The other sites are Den Ombo, Wingko Sigromulyo and Ayamputih, but complete vessels have not yet been found. There are rim sherds, but

we still are not certain what their original shapes must have been because no complete pot was found.

So all of those sites, need intensive study and I suggest that in the near future it is very important to undertake excavation at those sites.

IV. The Decorated Sherds

There are two techniques of decoration on pottery or sherds, those are impressed and incised designs. Between them, the incised design is most dominant compared to the other, and there are so many motifs. Sometimes impressed and incised decoration are used together. There are similar motifs both on pottery found in our sites and areas in Central Java as well as in other places outside Java.

In the Den Ombo site, sherds show a combination between impressed and incised. Impressed design consists of several small circles which measure from 0,5 to 1,0 Cm apart from each other, and are arranged in a row under the rim. The row of circles are bordered by two incised parallel lines one on top of another. The other variation of this motif is impressed design without the two border lines. The small circles are deeply cut so that they look like small holes through the walls of the vessel (Fig. 3: a - b). The sherds from the Gunung Wingko site have various motifs, either impressed or incised, or a combination of both.

The impressed designs, consist of various motifs which result from the impression left in the surface of the pots in the process of manufacture. There are various motifs which I would term as: *hias kain*, *hias tikar*, *hias keping jalur sedang*, *hias keping jalur besar* plus a combination of these motifs. *Hias kain* is the impressed design left on the vessel surface by cloth (Fig. 2: f), while the rest of the motifs are designs made from plaited materials as basket work and mats. Now I shall make the distinctions between *hias tikar*, *hias keping jalur sedang* and *hias keping jalur besar*. All of these are motifs left by the impression of some forms of plaited material.

Hias tikar is the simplest, involving only single interweaving of strips (Fig. 2: d). *Hias keping* is a complex variation of *hias tikar* involving this time in interweaving two strips at a time producing a diagonal pattern (Fig. 2: a - b). Further variation of *hias keping* are *hias keping jalur sedang* and *hias keping jalur besar* which merely involves the change in the width of the plaited strips. *Hias keping jalur sedang* has narrower strips than *hias keping jalur besar*.

The Gunung Wingko sherds consist of many incised motifs, mainly fish bone, net, series of parallel lines horizontally or vertically arranged

in a slanting position, chevron, finger nail print, comb motifs, etc. The fish bone motif usually is scratched on the shoulder close to the juncture of the main body of the vessel. It sometimes runs horizontally, sometimes vertically. They are arranged in double or single rows either at the neck or on the main body. The fish bone motif is usually scratched at the shoulder in horizontal position in twos and sometimes when found on the body scratched parallel to each other vertically. In other vessels the fish bone motif is found on the shoulder scratched horizontally on the body in a single row. Still on other sherds the fish bone motif is scratched vertically on the neck bordered by two parallel lines, or combined with slanting parallel lines (Fig. 4: a – d).

The net motif usually is scratched on the rim, shoulder and upper body. It is scratched vertically, flanked by two or three parallel lines in the same position. It is found at the outer part of the rim, and on the main body of the vessel. Sometimes the net motif is used by itself (Fig. 4: e – i).

The parallel line motif is used vertically and found on the main body of the vessel. Sometimes, vertically arranged parallel lines are combined together with what looks like chevrons with their appexes not quite connected at their tips (Fig. 5: a – f).

The chevron motif is also found on the main body of pots. It is also used combined with parallel lines. Sometimes they are arranged so that they suggest a fish bone motif (Fig. 4: b and j), and sometimes the chevron motif is used by itself (Fig. 5: g – h).

The fingernail print motif is rarely encountered compared to other decoration or motifs. It is scratched in single or double rows (Fig. 3: e – f).

The comb motif appears bordered by two parallel lines vertically or flanked above and below by horizontal lines and sometimes the comb motif is used by itself (Fig. 3: g – j).

Another motif is a combination of impressed and incised parallel lines arranged vertically. The way the points are applied and distributed on the surface can make this motif another type of impressed design. This decoration is found at the shoulder, and main part of the body of vessel. But this type of decoration is found only on a small amount of sherds (Fig. 3: d).

All of these decorated sherds were excavated on a depth of 200 to 300 cm. below the surface in association with other finds as mentioned above. The sherds of various designs and the plain ones were found a depth of 0 – 350 cm below the surface on the area of 130 m². There were found a total of 398.500 pieces of various sherds with 3.500 kgs. of weight.

The Wingko Sigromulyo motifs are characterized by the use of paddle marks. There are only a few motifs and they look very simple compared to those of Gunung Wingko. Among the impressed motifs the fish bone motif was also found. What is interesting is that they have similar decorative motifs but differ in the technique used. The other motif found on Wingko Sigromulyo sherds are chevrons, combined with parallel lines arranged horizontally (Fig. 7: a and c). Another motif of Wingko Sigromulyo are a series of parallel lines combined with some carved lines all of them arranged horizontally (Fig. 7: b).

The Ayamputih motif looks very close to those of Wingko Sigromulyo. Here, the motif is richer. The similarities are found in fish bone and parallel lines. We found chevron motif in double rows with very good and clear impression of the paddle marks. Sometimes the chevron are in a series of rows (Fig. 6: d – h).

V. The Similarities of Decorative Motifs in Other Areas

Based on our discription we can classify the findings into three groups; these are 'Den Ombo, Gunung Wingko and Ayamputih type complexes. Each type has similarities with pieces in other areas either in Central Java and several other areas in Java and even outside Java, including sherds which came from temple areas.

The site of Mujan is located in the regency of Purbalingga, district of Bobotsari, Central Java. The Mujan motif consists of circles in a series, or scratched in two rows, with parallel lines running horizontally above as border. The technique used is incised design rather than the ones found in Den Ombo which is a combination of incised and impressed motifs. The small circles horizontally arranged below the rim are impressed while parallel lines along the rim as well as other parallel and diagonal lines are incised (Fig. 3: a and c).

Another type complex of decorated sherds which has similarities with Mujan is Gunung Wingko and Gunung Piring on the south coast of Lombok Island (Goenadi, 1978: 28 -- 29). Among the three sites, Gunung Wingko covers a larger area, and all of the motifs from the three sites show that they were all incised. The motifs which were found in all of the three sites are: net motif, parallel lines and chevron motif, except for finger nail print motif which is found only in Gunung Wingko.

So far we have discussed the incised design found in the three sites, now I will talk about the impressed designs of Gunung Wingko. The Gunung Wingko type of impressed design has similarities specially basket motif with the Mujan and Prengguk site in Tembayat (Goenadi, 1979). The sherds were found at Mujan at the depth 70 cm below the surface. There

rable area over 5 Kms. long and half Km. wide used as late as the prehistoric period. But we can not tell how long the site was occupied, and it is therefore more difficult to speculate on such issues as migration of people along the south coast of Java, the social structure, the site and its relationship to pottery, technology, etc.

At this point it is important to stress that research on pottery should be extended all along the south coast of Java beyond Pacitan and Cilacap as far to the north and even on the coastal areas of other islands of the Indonesian archipelago. In this way we can get data about the migration of people and technology specially in the late prehistoric period. Archaeological activities on pottery must be done with laboratory examination of wares and also by comparison with pottery in other areas.

Based on the preliminary study of decoration it seems that there are three culture complexes in the south coast of Java between Pacitan and Cilacap, namely: the Den Ombo complex, the Gunung Wingko and Ayamputih. Each of them has its special set of motifs, although they have some similarities and differences among them.

The paddle decoration seems to be widespread either on the south coast or on the other inland areas in Central Java. But we do not know when it was first used and the date of its last usage. But the paddle decoration from several temples is very helpful in order to guess the date when paddle decoration was used. We know that the Borobudur was built in the beginning of the 9th century, while Prambanan and Plaosan date from the middle of the 10th century (Bernet Kempers, 1959: 41 – 62). So it can be said that the paddle decoration was used about that time.

In the excavation, sherds were found in big amounts as was the case in Gunung Wingko. This brings up several problems. There are just too many sherds that keep piling up in our storage rooms as more sites are excavated. After the sherds are analyzed, data from thousands and thousands of specimens need to be organized, systematized and compared. The problem arises of what would be the best way of analyzing the sherds and the data which increase after each excavation. We meet this problem not only in the Gunung Wingko site, but also in the Trowulan, Gilimanuk, Banten sites, etc.

To solve this problem I suggest that we must take advantage of modern technology like the computer. We should try to computerize the analysis of sherds in order to get more complete data in a faster way. We hope that the result will be useful in reconstructing pottery specially when many broken pieces are the only evidence available. If we get to

know as to how the complete or whole vessels must have looked like, it is possible to get more data such as dating, demographic information and so many other data.

Of course in suggesting computerization in the analysis of pottery, we must have solid data derived from extensive research in the field and develop the competence of our researchers.

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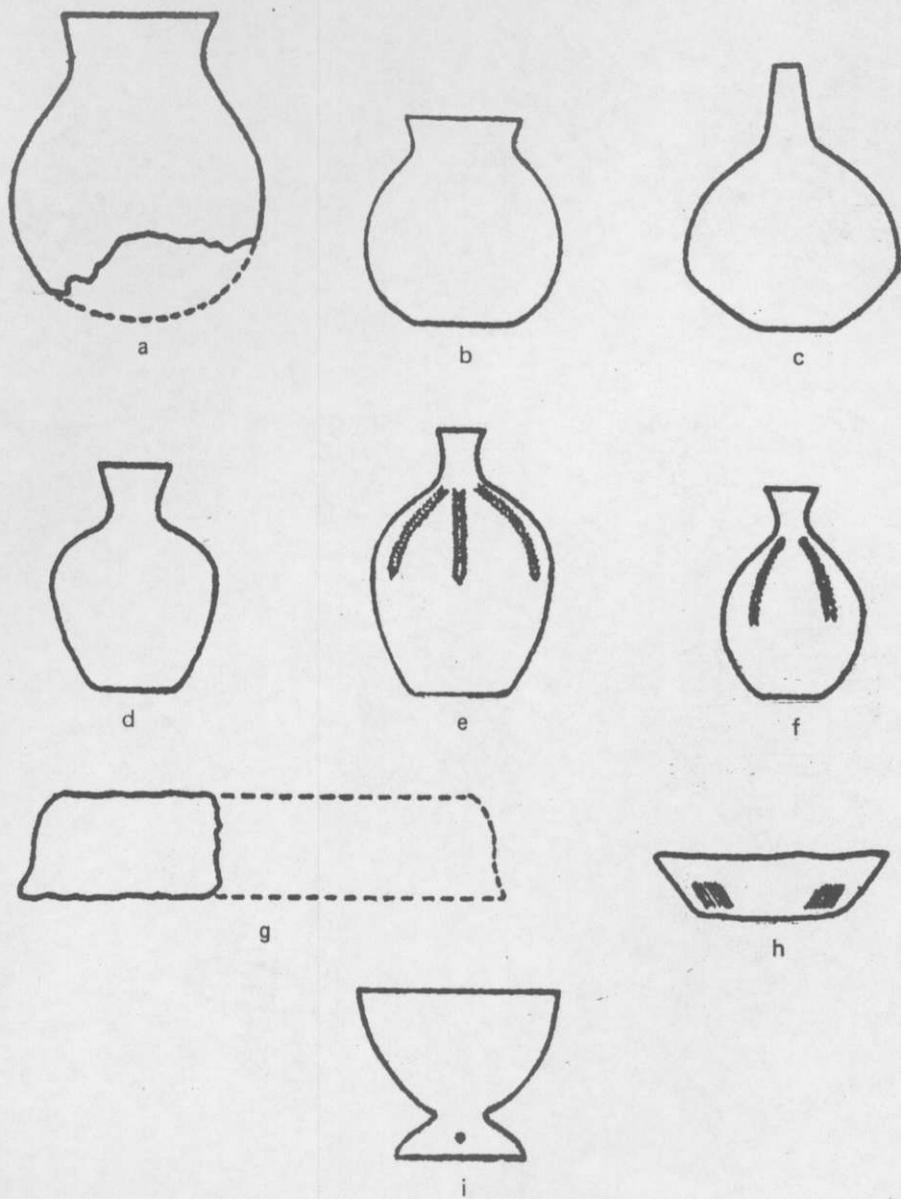


Fig.1 Gunung Wingko potteries

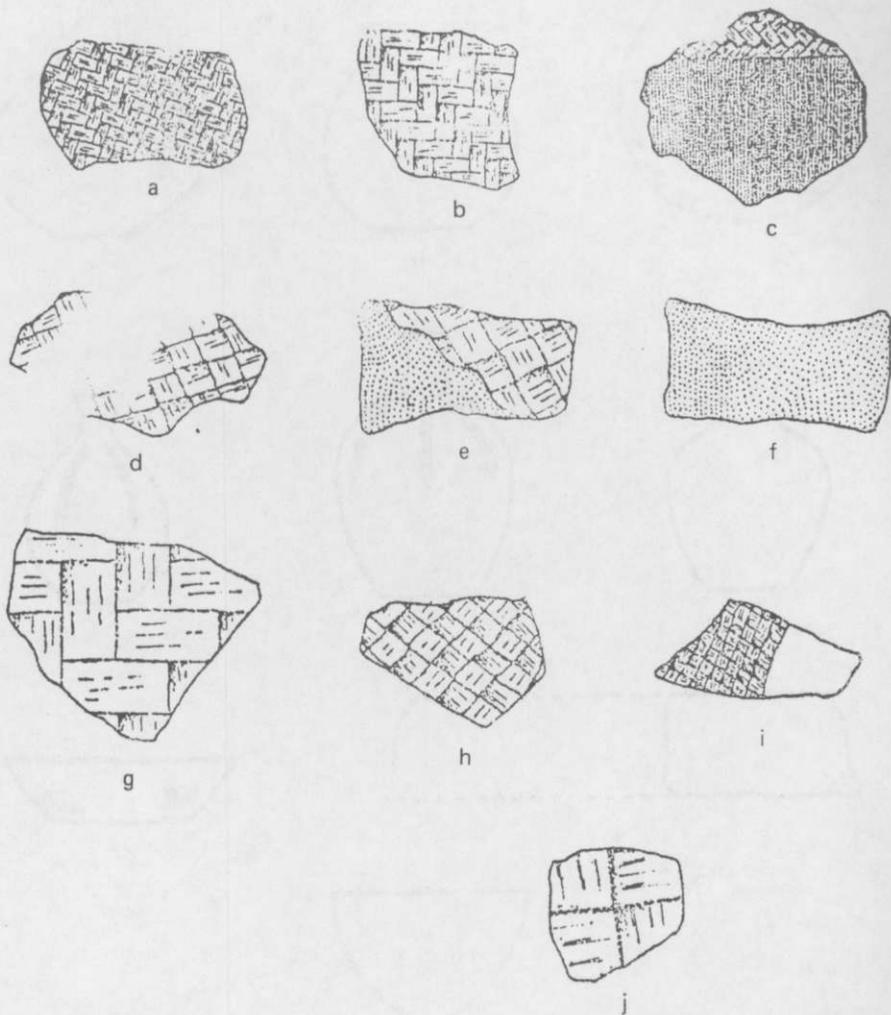


Fig.2. Impressed design on Sherds.

(a-f) Gunung Wingko motifs; (c-b) kepeng motif; (c) combination between kepeng and kain.

(d) tikar motif; (e) combination between tikar and kain; (f) kain motif.

(g-l): Mujan motifs.

(f) : Frengguk (Tembayat) motif.

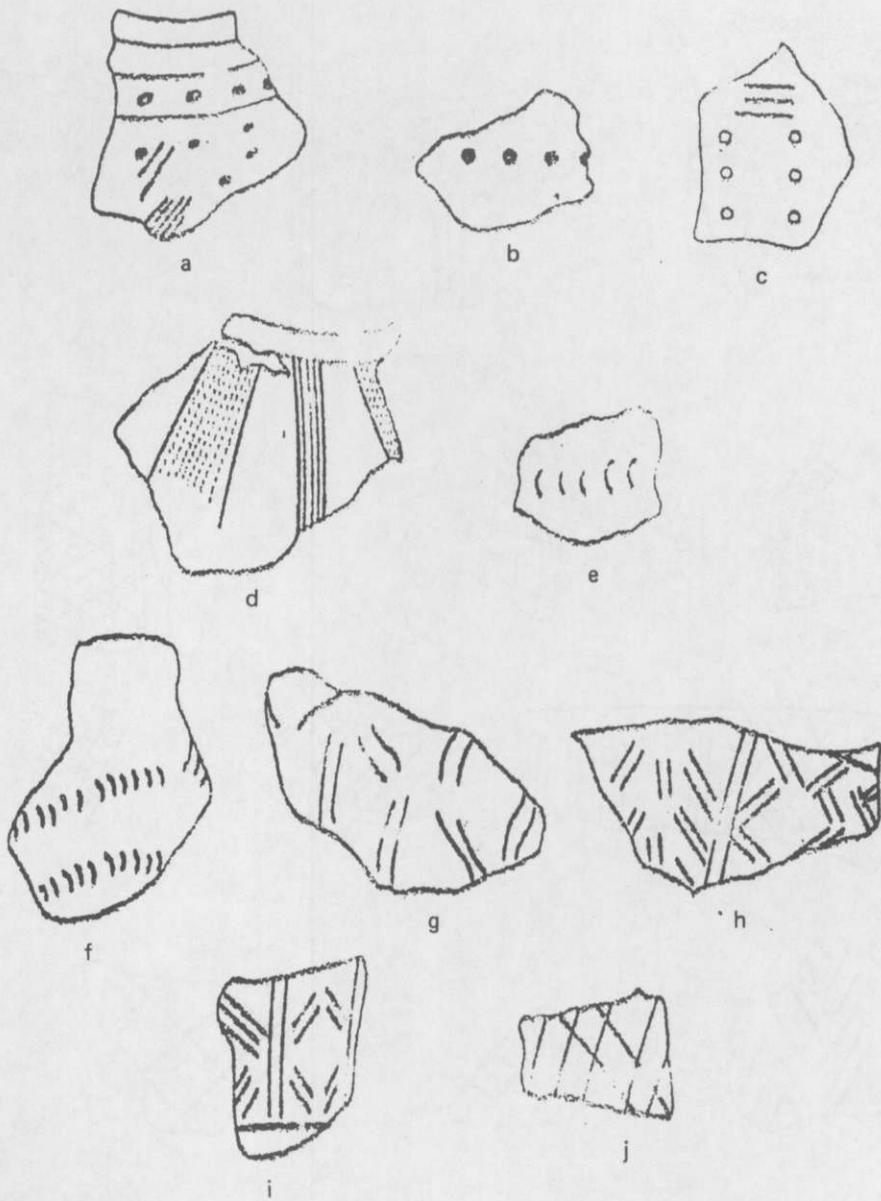


Fig.3. Incised pattern
 (a-f) Den Ombo motifs; (e) Mujan motif
 (d-j) Gunung Wingko motifs.

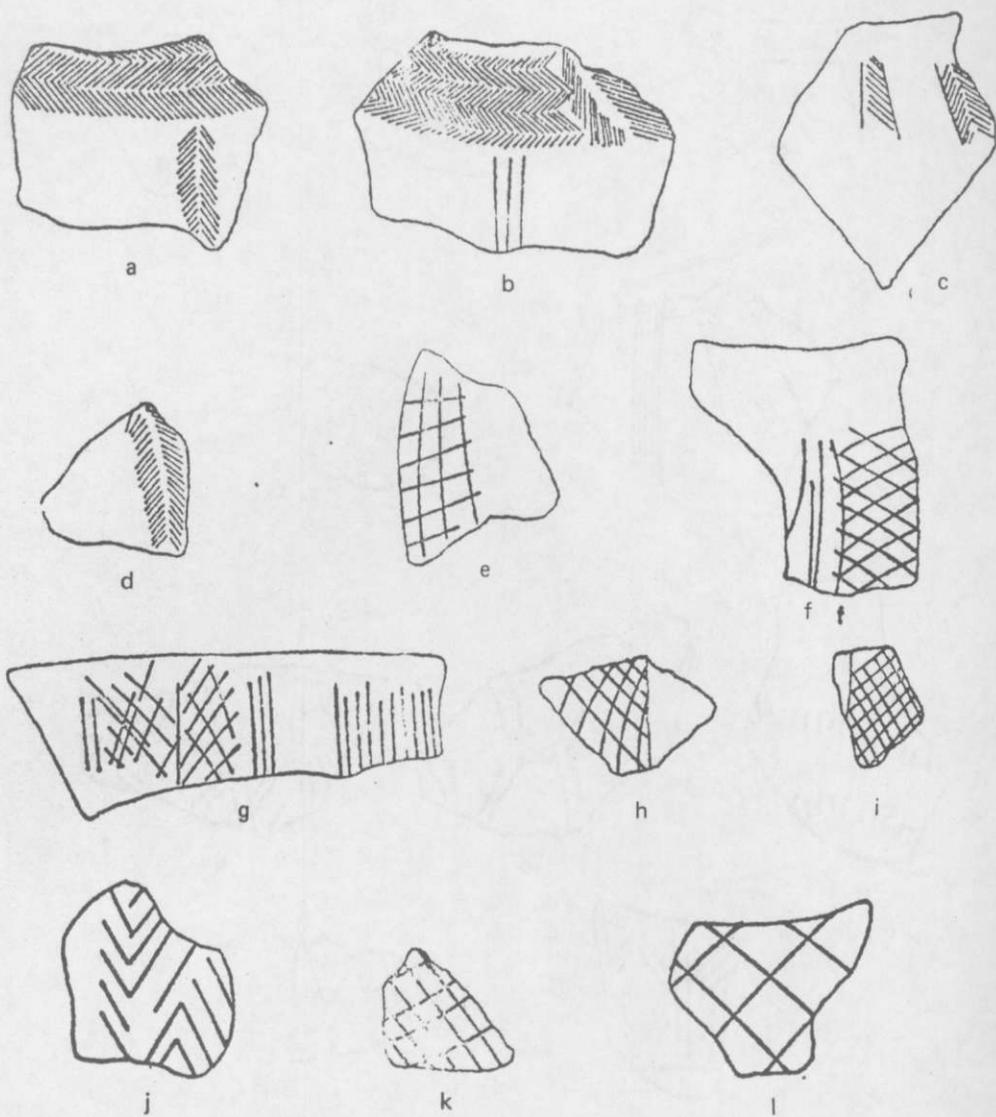


Fig.4. Incised pattern

(a-g) : Gunung Wingko motifs; (h-i) : Gunung Piring motifs.

(j-l) : Mujan motifs.

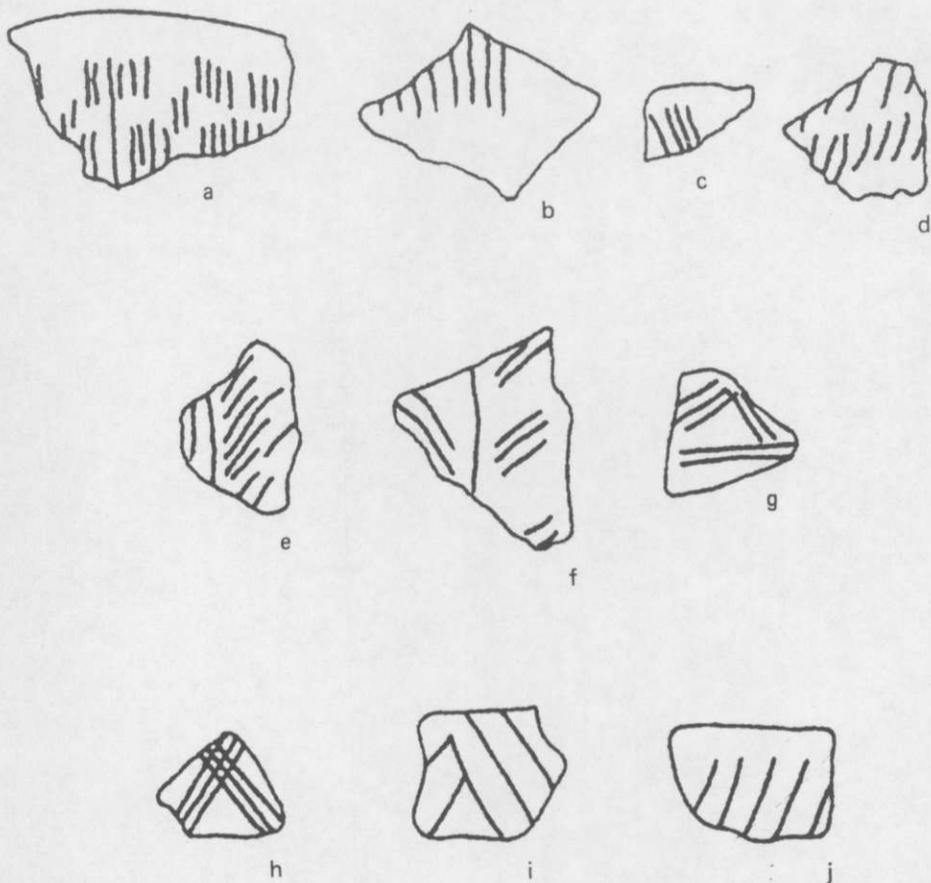


Fig.5. Incised pattern
 (a-h) : Gunung Wingko motifs.
 (i-j) : Mujan motifs.

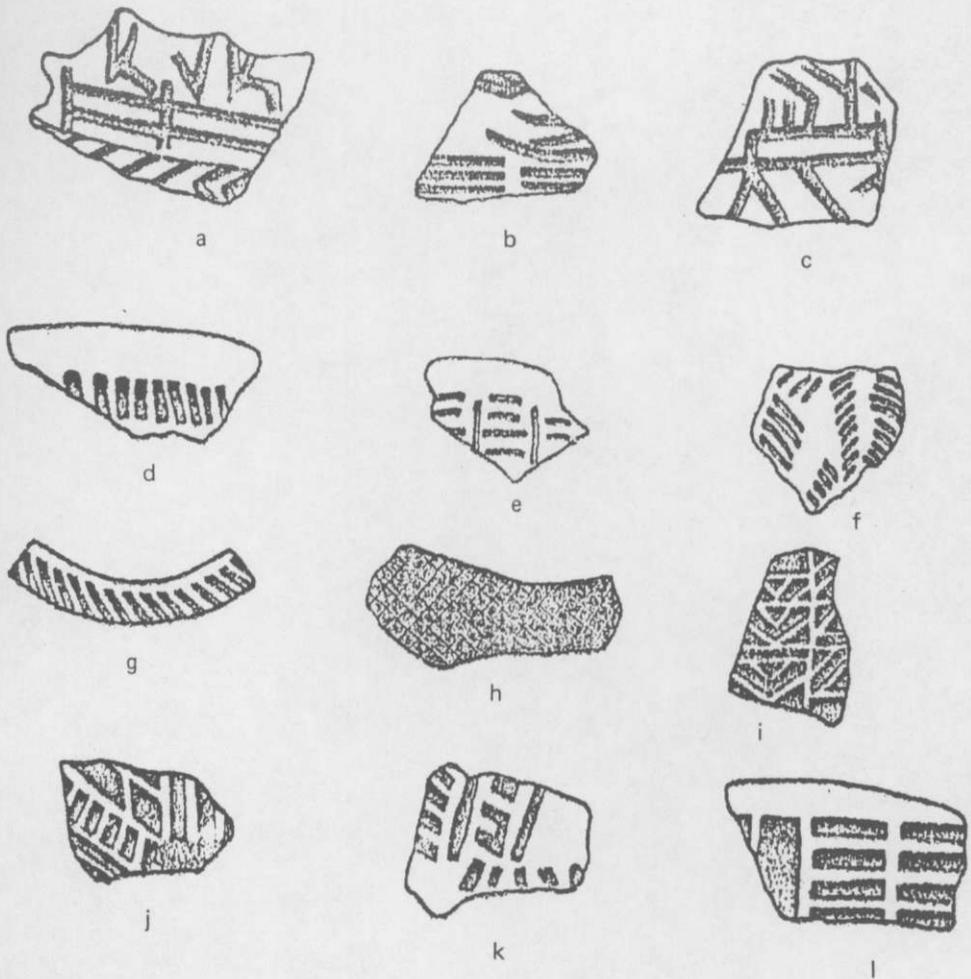


Fig.7. Paddle mark pattern
 (a-c) Wingko sigromulyo motifs
 (d) Mujan motif
 (e-f) Buni motifs
 (g-i) Plaosan temple motifs
 (j-k) Prambanan temple motifs
 (l) Si Lumbu Caves motif

A PRELIMINARY STUDY ON THE LOCAL CERAMICS OF TROWULAN

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Introduction

Trowulan, the site of the old kraton compound of Majapahit lies 14 kms. south of Mojokerto, almost at the foot of Mount Penanggungan, considered to be a sacred mountain in classical times. The first palace built by Raden Wijaya was, according to the Pararaton (Brandes 1896: 22-3), situated in the forest of Trik, the present village of Tarik, about 20 kms. from Trowulan.

Trowulan, the ancient Antarasasi, was already mentioned in the Nagarakrtagama (Pigeaud, 1960 (3): 73 - 3 - 3). No record, however has ever mentioned the shift of the capital from Tarik to Trowulan. The site of Trowulan covers an area of about 10 square km.: Several landmarks denote the importance of that place, such as the gates of Bajang Ratu and Waringin Lawang, the artificial pond of Segaran and the temple of Brahu. The collection kept in the museum of Trowulan is also a proof of the existence of a bustling life during the 14th - 15th century.

The first attempt to investigate the site was carried out by Wardenaar in 1889 (Satari, 1977), followed by amateurs who took a great interest in the history of Majapahit, like the Oudheidkundige Vereeniging Majapahit, and experts like Poerbatjaraka, Stutterheim and Maclaine Pont, who founded the Museum of Trowulan. Here are kept several kinds of artifacts of the Majapahit period, such as statues, foreign and local ceramics and bronze objects from the surroundings (Bejjong, Menak'Jingga, Nglinguk etc.).

In 1976 the National Research Centre of Archaeology of Indonesia started an intensive research consisting of surveys around Trowulan, and excavations, for which purpose a spot in front of the so-called Pendopo Agung was chosen on the supposition that here the soil is still undisturbed. Almost the whole area of Trowulan has already been demolished by people searching for gold or other precious objects, and at present old bricks are being dug out to be sold in powdered form for building material.

The excavation of 1976

The selected area measuring 60 by 70 mtrs. was divided into grids and during the 40 days of excavation in 1976 six boxes measuring 2 x 2 metres, and one test-pit were laid open. The maximum depth

reached in the digging was about 2.5 mtrs. The finds revealed amazingly varied aspects of the settlement:

1. The most prominent features found are several layers of brick structures. Each layer consists of one to five bricks with a width of about 30 to 50 cm. Floors of bricks, mostly consisting of broken pieces were also found. No mortar was used in the structures which have a northeast and southwest axis varying from by 10% – 15% to the east of magnetic north. Further investigation showed that other existing structures like the gates of Bajang Ratu and Waringin Lawang are also oriented towards the same direction.

The first excavation did not reveal a clear picture of the form of the structures, as the courses of the brick foundations intersect each other in a confused way. It should take at least three corners of a structure to make it definable.

2. Finds of foreign and local ceramic sherds, scattered around between the layers and amidst the foundations; concentrations of these two kinds of ceramics sometimes found together with cut-up animal bones covered by charcoal and ashes as if they have been consumed by fire. Ashes were also found in a hole on the surface of a structure.

3. Bones and teeth of domesticated animals like dogs and buffaloes and some fragments of elephant teeth.

4. Glass beads in red, white, blue and yellow colours.

5. Fibres of a coconut-tree trunk and fragments of palmtree fibre.

6. Fragments of bronze and iron objects, including chains, a nail, rings sometimes with a gem attached to it, and a spear-head.

7. About 264 pieces of highly oxidized Chinese coins or fragments, the dates of which are still unidentified yet.

8. Fragments of grinding stones and round river stones.

The finds of ceramics

Several kinds of foreign ceramics mostly dating from the 14th – 15th century, have been dug up from the site; Sung, Yuan and Ming wares, one piece even dating to the 10th century, some Khmer, Thai, Persian and the most plentiful of them all, Annamase wares. In the Trowulan and Pendopo Agung museums are also kept locally made Chinese ceramics.

Local ceramics (Earthenware)

The local ceramics can be divided into two main groups:

1. non-containers;
2. containers

About more than 30,000 potsherds have been found, consisting of rims, 60 types of thin rims and 57 types of thick rims, bodies, both plain and decorated, carinations and bases, consisting of flat, concave or convex low or high-rimmed bases.

Next to the artifacts obtained during the 1976 excavation, a kind of objects which are typically Majapahit period's products are the piggy banks or money-boxes which is a proof of the prosperity of the people. Majapahit or Trowulan saving-banks are shaped into human or animal figures, like a Semar or a pig, and rounded forms with the typical decorations consisting of wavy lines incised between single or double straight lines, encircling the body.

Also small round holes are placed at irregular intervals on the body. They might have served as peeping holes to see the content of the box, or had been made for a technical purpose for example to prevent it from bursting during the firing in the kiln.

b. The kendis

Under the kind guidance of Mr. James Watt from Hongkong, in 1979 we tried to identify and classify the kendis of Trowulan, found in excavation pits or as surface finds and also by observing almost complete pieces from the museums of Trowulan and Pendopo Agung. But we still have to be cautious about the exact dating, since most of the other artifacts found were made during the golden period of Majapahit, i.e. the 14th – 15th century.

The classification

There are five types of kendis:

1. Type I: round shaped kendi with a slim long spout placed at an angle of about 45° . It has either a high footring or lacks it. The dominating colour of the clay is light red, unburnished and belongs to the most fine-paste potted earthenwares with a high technique of firing. No striation is visible. The surface of the spout was polished with a piece of bamboo. 14 specimens of this type are found, and most of them are long-necked.

2. Type II: round rather flat body with a shorter and thicker spout, pointing at an angle of about 60° . Medium or dark red coloured. It has also a high footring and no striation is visible, the surface of the body is burnished and has a high technique of firing.

3. Type III: has a wider base of spout and a flatter form of the body; this type consists of two subtypes. Like type II sub-type IIIa has no striation, while type IIb shows it clearly. No footring. Pointing 60° upwards:

1. Non-containers

a. The objects which constitute the majority of the non-containers are roof tiles made of baked clay, which Ma Huan mistook for wooden shingles (Groeneveldt 1976: 39–46). No less than 309 kgr. of tiles amounting to 27.000 fragments found in different sizes have been analysed. There are four types of roof tiles according to the difference in thickness those of 6 mm, 7 mm, 8 mm and 9 mm.

Some have straight edges, while other ones are hooked on one side. By comparing them with the existing complete pieces in the museum of Trowulan we might be able to estimate the type and amount of buildings using those tiles.

b. Curl-shaped roof ends and rooftop decorations having among others the shape of a pot, a miniature building, birds, a lotus bud.

c. Ceramics discs, chipped off on purpose from potsherds, either from terracotta or glazed foreign ceramics. These objects which are found in the whole of South-east Asia are cut in different sizes and thickness. They may have been used in disc-throwing games or for ceremonial purpose (Ambary, 1977).

d. Terracotta statuettes, usually having a flat base, and made in a small size. The excavation yielded a woman's head and a fragment of a piglet.

A huge amount of terracotta statuettes is kept in the Trowulan museum, depicting among others men or woman and children with different headdresses, musicians, even a Chinese merchant and army-commander, a European gentleman, and beautifully moulded animals. These objects may have served as toys (Satari, 1974) or for ceremonial use, like for temple or house deities. Small terracotta objects also comprise miniature houses and temples, serving as maquettes.

e. Fragments of ovens, braziers or incense-burners. These objects are indicated by the three knobs placed on the rim, holes in the inner surface and a square hole at the sidebottom.

2. The containers

We come now to one of the most important proofs of the existence of a habitation, namely the pots or containers. Since the working on the analysis is still in progress, most of them can only be presented in a general description. The containers comprise:

a. Fragments of jars, kendis, most of which are very small sized, pots for spices, bowls, round and square "pastryplates", which might be used for offerings. Some of the bigger jars sometimes have white paste applied to the body.

Amount of subtype IIIa : 12

Amount of subtype IIIb : 4

4. Type IV: has a rather plump and ellipse-formed base and a small spout's end. The surface is fine and burnished. The striation is visible. The spout points about 45° upwards. Colour: dark red and no footring. Of this only one fragment is found.

5. Type V: has an egg-formed flat body with a spout in the form of a woman's breast, with an angle of about 60°. Colour: dark red-black or medium red.

Amount of fragments found : 9.

Besides these five types which are classified according to the form of the spout, several unidentified species are also found, some have concave formed ends and other pieces are hooded which have a more or less phallic form.

During the excavation together with the spouts, also lids of kendis have been discovered. We tried also to classify those types in accordance with the type of spouts.

1. Type I: is a blunt-pointed lid which is hollow inside very fine brittle ware with a yellowish colour.

2. Type II: a rather pointed top. Fine unburnished ware. Colour: yellowish to light-red and black.

3. Type III: has a pointed umbrella-like top with a pin inside which points downward. Colour: red and burnished.

4. Type IV: an umbrella-formed high lid with the edges pointing upwards. Colour: red and pinkish.

5. Type V: has a narrow top with a knob and a hollow innerside. Colour: reddish.

Decorations of local ceramics

Most of the decoration consist of lotus petals carved on the surface of the rim around the neck or on the body of the pots. Other types of decoration are scrolls, geometric patterns and rosettes. Some unique decorations are also found: on one of the pots kept in the Pendopo Agung we can see a single wajra carved on the body. Stutterheim discovered a kendi carved with the headless figure of a man with clumsy arms and a remarkable genitalia. Underneath we can read a script: ngung ubar nu . . . (to cure those who . . .).

Conclusion

Of all the local ceramics found during the research in Trowulan the kendis have yielded the most complete data for the purpose of prelimi-

nary analysis. They are found in sizes varying from very small to medium. What was actually the function of the kendis? The very small ones may have served as toys or for offerings at home, besides for daily use. We have also kendis for ceremonial use, with a symbolic meaning like the kendi spout having the form of a woman's breast and the phallic form, and the peculiar kendi mentioned by Stutterheim.

These kinds of kendis might be used for fertility rites or to ward off illness, healing sick people, etc.

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PRELIMINARY REPORT ON THE TRADE CERAMICS FOUND IN WARLOKA, WEST FLORES

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I. My paper is actually a report on my short visit to Ruteng the capital of Manggarai regency (Kabupaten), Flores island and to the village of Warloka that resorts also under Manggarai. I visited those places in last April 7, 11, 14 (1979).

In Ruteng I had observed the ceramic collection of the office of the kabupaten of Manggarai. On the other occasion I visited also the Warloka site where according to the officials those ceramics came from. From that site I brought back with me some fragments as surface finds to compare with the ceramics in Ruteng.

Most of the ceramics in the collection are broken and very roughly rebuilt; very few are wholly undamaged, these are usually the small size pieces. The collection amounts to more than 500 pieces that comes from several countries of origin. Those remains are quite similar to the ceramics finds in different places in Indonesia like South Sulawesi, Kota Cina (near Medan) and Java, especially the surroundings of the Majapahit site in East Java. Making further observations of these finds I found that in many cases there are some similarities with the finds in the Philippines which are mentioned in the Locsin's book.⁽¹⁾

II. In my study on the collection of Ruteng, I have divided the pieces into three coming from countries of origin: China, the greater part, Vietnam or Annam and Thailand.

The clay body of those ceramics are:

earthenware;
stoneware;
white porcelain;
low fired porcelain.

The forms are:

plates with different sizes: from diameter 9 cm – 38 cm;
with round sides (C forms);
with narrow and wide lips;
small plates with angled waist;
bowls with different sizes: from diameter 10 cm – 26 cm;
height 4 cm – 8 cm;

cups;
vases, like: kinuta vase;
jarlets;
tempayans (martabans); covered boxes;

The decorations are:

incised;
applied reliefs;
stamped reliefs;
moulded reliefs;
brush paintings;

They can be divided into wares of:

monochrome: white and greyish white glazed;
celadon with its different tones;
creamish white;
brown glazed;
lead glazed;
polychromes: red under the glaze;
blue under glaze;

The ceramic originated from China (early Sung, middle Ming).

Celadons; many of the ceramics with celadon glazes are from Lung Ch'uan and some pieces show the other Che-kiang kilns. On this occasion I shall mention some pieces only which are very interesting. Firstly is a fragment of a kinuta vase; it is an upper part only; the size now: H. 20 cm; the clay body is porcelainous stoneware, it has a leaf green celadon glaze, smooth and rather shining; inside the vase is thinly glazed; its form is tall with angled and sloping shoulder, straight and long neck; against the neck are two vertical handles in the shape of phoenix heads; the mouthlip is wide in the shape of a plate with an upright lip border. Similar pieces are in the collection of Sir Alan and Lady Barlow, England²⁾ and in the Museum Pusat Jakarta³⁾.

Another Lung Ch'uan ware is a basin⁴⁾ which is made of porcelain; the side is straight and a little sloping and has a flaring mouth lip and angled waist; the footring is rather high and very refined. The celadon glaze is of leaf green colour and not so shiny, smooth and thick; the rim of the foot is unglazed like the other Lung Chu'an ware⁵⁾. Diameter 11 cm; height 2 cm. Among the basins which are of very fine quality, there are one or two pieces which are very well potted but they are very badly glazed.

A cup of a lotus bud form made of porcelainous stoneware; the glaze is brownish green celadon, smooth and thick; the lip border is

unglazed and showing a chocolate oxidation from firing; the footring is small and rather high and very thin; height 3 cm., diameter 6 cm.

A large plate made of porcelain; it has narrow lip with its border a little upright; small foot with a thick and sloping footring; it has a leaf green celadon glaze covering the whole part of the piece except the footrim; on the surface is an incised lotus spray; diameter 38 cm. Besides that there are large plates about the same sizes with the vertical ribs on the walls; the plates with C-sides have the unglazed rings on the surfaces and some plates with C-sides have low footrings, on the bases have unglazed rings⁶⁾.

Plates of medium sizes, varying from 15 cm – 22 cm of diameters; they are decorated with molded lotus petals on the exterior; the footrings are thick and rather high⁷⁾.

Plates of medium sizes varies from 12 cm – 20 cm of the diameters; They are C-sides' forms as well as flattened mouthlips; on the surfaces are appliqued fishes, in clockwise or anti clockwise direction; some of these plates have very refined footrings and are very smoothly glazed.

A cup with deep and S-shaped side; it has two handles on the sides; the glaze is smooth in the colour of greyish green; height 12 cm.⁸⁾. Small incense burner with three small legs; these legs are too short so that the incense burner could'nt stand properly on its legs; its glaze is of brownish green colour⁹⁾.

Under glaze red

I found a small fragment with red under the glaze decoration as a surface find when I visited the Warloka site; this is a fragment of an onion-shaped bottle; the interior is unglazed so that the wheelmarks are visible. The decorations are circle lines and the pointed grasses or the feathers of fenghuang which often decorate the under glaze red bottles like the piece in the Museum Pusat Jakarta No. 3837, diameter 3,2 cm.¹⁰⁾

Under glaze blue

There are some pieces with blue under the decoration, all of them are in the WUNUT house in Ruteng. They are two medium size bowls and one cup, one plate and one small bowl.

The former two bowls are made of porcelain with rose burnt; the forms are S-shaped sides with thick and rather high footrings with sharp edges; they have bluish-white glazes, and are rather shiny; the footrings and the bases are unglazed; the decorations are in the exteriors and very well painted showing the flowers and scrolls; diameters; 15 cm., height

7 cm., The cup is quite similarly decorated as the bowls; diameter 6 cm., height 2½ cm. These pieces are similar to those in the collection of the Museum Pusat in Jakarta, No. 4901B175, 2909; both were found in Takalar and Soppeng in South Sulawesi.¹¹⁾

One plate of 26½ cm diameter with C-side and uneven form, made of bad quality of porcelain that does not ring well when it is struck; the glaze is uneven and dirty white; the mouth rim is reddish burnt; on the surface is a circle, inside the circle is a mythical animal, the kylin in flying position and facing the moon; the footring is formed by a depressed base, this is rather unusual.

A small bowl of Swatow ware, diameter 9 cm., height 2½ cm.; it is made of low quality, the glaze is greyish white colour; there is little decoration that is four flowers (very unclear); it has a small foot with a rather high footring with sharp edges.¹²⁾

The brown glazed wares

The ceramics of this group are usually belonging to the daily used pieces. One of them which is very interesting is a flower vase of a medium size (h. 20 cm).

Its shape is high and melonlike, straight sides, sloping shoulder, sturdy neck and high; it has a trumpet mouth with a wavy border; with out footring, the base is a little concave.

The vase is made of buff colour stoneware and a little sandy; the glaze is unevenly light chocolate and covering the whole piece which is stopping short above the foot.

The flower vase of this shape usually is made of white porcelain or porcelainous stoneware which materials tally with their function as water container.

Another brown glazed ware is a small jar with a melonlike depressed shape sloping shoulder, short neck, small opening with a rather round and thickened mouthlip. It has four horizontal handles on the shoulder; rather round sides and small foot. The clay body is quite similar to the former piece; the glaze is uneven light brown colour and covering the whole piece, stopping short above the foot; the footring is very low and formed by depressing the base. H. 12 cm. This piece is very similar with one in the Museum Pusat Collection No. 2647, which was found in the area of Kediri in East Java; see also Locsin page 58 plate No. 41, 93¹³⁾.

Among the ceramics from Werloka, the tempayan or martaban jar is rather common and often found; its fragments can be easily collected as surface finds on the site or on the path to the site.

In Ruteng I observed a tempayan which upper part is broken away; the shape is rather high, and narrow and has a sloping shoulder, short neck and wide opening. The glaze is of light brown colour and unevenly covering the whole part of the piece except the foot. The body material is of buff colour. On the shoulder is a relief decoration of nagas; against the neck are the leafshaped and vertical handles which are ornamented with very unclear human faces. The original handles probably are four of which only two handles are left now. 32 cm.

Creamish white and related wares.

Are these pieces usually made of low-fired porcelain, which is not very hard and of high-fired porcelain which is very hard. The colour of the bisquit is white or creamish white which is almost entirely glazed with the transparent creamish white or bluish-white glaze. Many pieces are showing dirty white from being too long buried. The decorations of the pieces are reliefs, stamped or moulded and applied and incised with lotus petals, scrolls, monster faces and fishes. Here are some pieces which are interesting enough to be mentioned.

- Group 1* (a) Plates, of circular form, these are perfect and uneven round, very shallow; made of high-fired porcelain of greyish white bisquit. The glaze is greyish colour and uneven; the mouth rims are unglazed, the exteriors are glazed until above the foot; the footings are very low and round. Some of the plates are decorated on the mirror with the relief of 2 fishes, clockwise or anti clockwise; the reliefs are in the outline of the fishes. Diameter varies between: 12 – 13 cm. ¹⁴⁾.
- (b) Deep and almost conical plate with narrow lip made of high-fired porcelain; the glaze is greyish white colour covering until above the foot. In the mirror are seven spurmarks that form the circle; on the outside are comb technic decorations. The footrim is low, thick and heavy with sharp edges. Diameter: 26 cm ¹⁵⁾.
- (c) Deep plate with an almost upright wall side which is growing from the foot, the porcelain is very refined, thin and showing the transparency against the light; the colour is bluish white, the glaze is smooth and rather shining; the mouthrim is unglazed; without footing and strangely enough: the base is glazed and is a little convex. Diameter: 14 cm; height: 3 cm. ¹⁶⁾.

Group 2. Bowls with sloping and almost straight sides, the glaze is of creamish white colour covering until above the foot,

the mouthrim is unglazed, the decorations are moulded or stamped reliefs in the shape of scrolls and lotus petals. The footings are low with round edges. Diameters varies between: 7 – 14 cm.

Group 3 Covered boxes, most of the covers are missing. The glaze is creamish white covering until above the foot; the decorations are very unclear moulded reliefs of scrolls. The footings are low. Height varies between: 2 – 3 cm; diameter varies between: 10 – 14 cm. This group includes a fragment of a small flower vase (?). The fragment is showing a high and hollow foot of 3 cm in height. The glaze is creamish white, inside the hollow foot is unglazed; the outside is decorated with the moulded relief of scrolls.

Group 4 Vases of pomegranate shapes with heavy and long necks and trumpet mouth with wavy border. The material is stoneware with reddish burnt. The glaze is greyish white that covers until above the foot; on the sides are the irregular comb-technic decorations. The standing is thick and heavy with sharp edges. H. 24 cm.¹⁷⁾ One of the fragments shows a relief of moulded decorations on the lower part of the neck. Beside that there is a smaller size and attractive vase (h. 15 cm.) with 7 lobes.

The ceramics from Vietnam (Annam), 13th – 15th Century.

The quantity of the ceramics from this country is the second after China. Most of them are glazed with creamish white, yellowish white or dirty white; some are transparent and some are finely crackled; some are decorated with blackish brown brush paintings, incised with the motives of flowers and scrolls. Among the Vietnamese wares there are pieces with brown slip painting on the base, the footings are finely carved (1). Some pieces have spurmarks in the inside of the bottom: 3, 4, 5 or 6 marks or unglazed rings.

Here are some interesting pieces to be mentioned in more detail:

A bowl of 13 cm. diameter and 3½ cm height; it has a flaring mouthlip and is made of beige colour stoneware; the exterior is dark brown glazed, the interior is yellowish grey with an unglazed ring on the bottom; the foot and the base is unglazed; the exterior is decorated with incising through the glaze, showing cloud motives.

This kind of bowl is very rare and quite similar to the piece of the Museum Pusat Jakarta No. 1279¹⁸⁾ and one is mentioned in Roxanna's book, plate 9 No. 28¹⁹⁾.

Other interesting pieces are the cups with very simple forms, which have cylindrical sides and are unevenly potted and glazed; the glazes are creamish white and without footings and flat bases; height varies between 2½ – 3 cm.

In this Warloka site are some blackish-brown painted pieces which are similar to the collection of Museum Pusat Jakarta No. 2175, that is a cup, and No. 278, a plate²⁰⁾.

The ceramics from Thailand, 15th – 16th Century.

Many ceramics from this country are found together or side by side with the ceramics from China or from Vietnam. In many excavations it is represented by many kinds of forms like plates, bowls or different kind of animals, especially the finds in South Sulawesi.

The finds in Warloka which are now in Ruteng are represented by quite a few pieces, those are two celadons and one cover box. Let us mention in more detail:

Firstly a deep plate with fluted mouthlip, circular border, the clay body is a heavy and greyish stoneware, reddish burnt; the glaze is greyish green celadon with transparency; the plate is decorated with four incised flower leaves. On the base is a ring spurmark; diameter 27 cm.; similar to this piece is one in the Locsin's book, plate 164, above-right.²¹⁾

Secondly is a cup of almost cylindrical form; the glaze is greyish green celadon; it has the vertical irregular ribs; height 4 cm., diameter 3 cm. Similar to that piece is one in the Museum Pusat Jakarta No. 2665²²⁾.

Thirdly is a covered box, the cover is missing, of a compressed form, the decoration is in underglaze black showing the panels with the scrolls inside the panels; stepped foot; the footing is formed by the depressed base on which is a pontil mark; diameter 12 cm., height 6 cm.

Among these above mentioned ceramics there are:

- Chinese coins which I couldn't yet identify;
- Earthenware, most probably locally made;
- Armrings made of bronze or brass and carved sea shells.

According to the officials in Ruteng these ceramics were found in the old graves by the so called "pot-hunters" who excavated them about 5 years ago. Seeing the pictures of that old grave of 1937 which were kept by a person in Kupang, I noticed that the style of the grave is pre-historic as it was using the manside poles of stone called menhir²³⁾.

III. Warloka is a village not very far from Labuhanbajo. Before World War II, Labuhanbajo was an important export harbour of West

Flores; the export goods are forest products such as cinnamon, tamarind, kemiri (kind of nut), rattan, bee-wax etc. and ocean products such as pearls, tripang fish, etc.

Most probably Labuhanbajo was busy since olden times and the dead people were buried according to local traditions. I was informed that there are old graves like in Golo Mburing (Warloka) in the small islands surrounding that area, including Komodo island. Indeed I visited Rinca island and I found there the broken stone poles and the fragments of ceramics in the alang-alang field.

Studying these facts further investigations will be very necessary and important in this place, as probably we could understand clearly the connection between the trade ceramics discovered here and the pre-historic traditions. The biggest problem is: when those trade ceramics arrived or reached this place.

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1. Locsin, Cecilia and Leandro, *Oriental ceramics discovered in the Philippines*, Tokyo, 1967.
2. Sullivan, Michael, *Ceramics bronzes and jades in the Alan and Lady Barlow collection*. London 1963, plates 80a and 81b.
3. Abu Ridho, *Oriental ceramics world's great collections, Kodansha*, Tokyo 1977, plate 130, monocolour.
4. Actually there are more than one basin.
5. Similar piece is in Museum Pusat Jakarta No. ; see also Locsin, Cecilia and Leandro *Oriental ceramics discovered in the Philippines*. Tokyo 1967, plate 116.
6. *Ibid*, page 16 – 2nd panil.
7. *Ibid*, plate 54.
8. *Ibid*, plate 65.
9. *Ibid*, plate 63, left.
10. Abu Ridho, *Oriental ceramics world's great collections*, plate 44, colour.
11. *Ibid*, plate 163, monocolour.
12. Similar to that piece is one in the Museum Pusat Jakarta, No. 1567.
13. Locsin, Cecilia and Leandro, *Oriental ceramics discovered in the Philippines*, Tokyo 1967.
14. *Ibid*, plate 69, 70, 137.
15. Such a plate I found in Kota Cina too.
16. Similar pieces are in Museum Pusat Jakarta, No. 1052, found in Northeast of mount Slamet, Central Java; No. 1070, found in the northern part of Madiun, East Java.
17. A similar piece is in Museum Pusat Jakarta No. 1014, found in Lampung, Sumatra; see also Abu Ridho; *Oriental ceramics world's great collections*, Vol. 3, Kodansha, Tokyo 1977, plate 118, monocolour.
18. Abu Ridho, *Oriental ceramics world's great collections*, Vol. 3, Tokyo 1977, plate 110, monocolour.
19. Brown, Roxanna M., *The ceramics of South-East Asia Osford*. Kuala Lumpur, 1977.
20. Cheng Lammers and Abu Ridho, *Annamese ceramics in the Museum Pusat*. Himpunan Keramik Indonesia, Jakarta, 1974, plates 1A 10/2175 page 9 and 1A 3/278 page 6.

21. Locsin, Cecilia and Leandro: *Oriental ceramics discovered in the Philippines*, Tokyo, 1967.
22. *Ibid*, plate 171, below.
23. R.P. Soejono et al, *Sejarah Nasional I*. Jakarta 1976, page 198; Bambang Soemadio et al, Jakarta 1978 page 104.

FURTHER NOTES ON THE CLASSIFICATION OF CERAMICS FROM THE EXCAVATION OF KOTA CINA *)

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Introduction

1. Sumatra from the point of view of archaeological research is undoubtedly a very important area for intensive research. Compared with researches carried out in Java, those of the Sumatra sites have until recently been neglected. Several factors inhibited research in the area, one of the most important being so far the lack of sufficient numbers of research workers, which made it impossible to cover an area as large as that of Sumatra. Another factor was that in previous years opportunities and funds planned for Sumatra were available only in restricted amounts. There is however no reason for us not to make a good start now. Research on Sumatran sites which have been made our focus of interest, have been stepped up since 1970. (Ambary, 1979: 1).

2. The village of Kota Cina is located at 3°43' north latitude, 98°38' east longitude, situated approximately seven kilometers inland from the mouth of the Deli river. The settlers of Kota Cina have taken advantage of a tongue of land about 1,5 meter above high tide level to build houses and plant coconuts and bananas. Some of the surrounding lower land is planted with rice.

The village is one kilometer from a side road which is connected to the main Medan—Belawan highway. The center of the city is 15 kilometer away. (Bronson, 1974: 19, Ambary, 1978: 4, Miksic, 1979: 127—128).

3. Kota Cina was known as an archaeological site by a report of Anderson who visited east Sumatra in 1823. Although he seems not to have visited the site, he records that "at Kota Cina is a stone of a very large size, with an inscription on it, in character not understood by any of the natives" (Anderson 1917: 294, Miksic, 1979: 112—113). The site was revisited in 1972 by McKinnon, who had been informed that numerous fragments of Chinese

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pottery were to be found scattered over the village ground. This site which covers approximately 50 hectares had deposits of ceramic artifacts and other objects which are important for archaeological research.

The research carried out afterwards by McKinnon and Luckman Sinar was described in a report which mentioned finds of a brick building, two Buddha statues and a great number of foreign ceramic sherds of the Sung-Yuan periods. (McKinnon, 1973, 1974, 1977, 1978).

4. The National Research Centre of Archaeology has carried out an excavation at the Kota Cina site in 1977 from May 12 to June 12. The selected site consists of corridor (Lorong) XVII, XIX and XX. Three sectors of the excavation site namely coridor XVII (Sector I, II and III) were selected situated in a garden owned by a local inhabitant, named Teteh. On this site a brick structure without the use of mortar was found. There were also a number of surface finds consisting of foreign ceramic fragments.

The second sector was the Kramat Pahlawan which also showed bricks and foreign ceramics. The third sector selected was a coconut grove owned by Teteh which had a great number of foreign ceramics on its surface. (Ambary, 1978: 7).

The results of the Kota Cina excavation (1977) lead to the following conclusions: The finds of brick structure which was already neatly arranged, yet without any use of mortar.

Together with this brick structure a great number of foreign ceramics were found. In spit 13 (of the depth: 1.30 cm), in sector I.D3 a charcoal sample was taken for C.14 dating. The sample in collaboration with McKinnon was sent by John Miksic, University scholar of Cornell, who joined the team, to Harwell Atomic Laboratory, London. The result was: the sample showed the absolut date 1080 ± 75 A.D. Most of the ceramics finds were Lung Chuan celadon of plates and bowls and a number of Te Hua white ware. Those ceramics dated from the early Sung of 10–11 Century up to the Yuan period (13 + 14 Century). The range of ceramics finds of excavation 1977 can be concluded from samples taken from Sector III. A.2., measuring 2 m x 2 m, with a depth of circa 1.60 cm; it yielded:

680 fragments of Chinese ceramics with following details:

190 rim fragments or 27,94%

449 body fragments or 66,02%

41 base fragments or 6,04%

From the 680 samples can be concluded the following classification in period:

327 or 48% dated from Sung Period (10–13 Century)

348 or 51,18% from Yuan period (13–14 Century),

5 or 0,82% of Ming or later Chinese ceramic period, and the fragments was found on surface or disturbed layer which could not represent for the dating of the site. (Ambary, 1979: 9).

The Classification of Ceramics Found in Excavation 1979

1.1. The excavation 1979 was carried out from July, 10 to August, 10. Four Sectors have been selected namely Sector I (B.2, C.7, C.8, F.2, I.2, L.4–5, I.7 all this was the extension of the previous excavation 1977), Sector IV. A.1., Sector V. A.1. and Sector VI. The site of Sector I and Sector IV owned by Tete and of Sector V is owned by Zakaria, Sector VI owned by Hamid, people who are local inhabitants of Kota Cina.

A large number of artifacts as well as non-artifacts have been found namely: remains of brick structures, some fragments of metal objects including; "Iron and bronze slags, a fragment of wirestring of bronze material, two small round rings of net-sinker", coins, fragments of Islamic glass, beads which varieties of size and colours, a fragment of a crucible and large quantities of ceramics fragments. The finds of non-artifacts are: animal bones, seashell pieces and stones.

1.2. Fragments of ceramics collected during the excavation 1979 amount to 2347 pieces, of which 2217 are from excavations and 130 pieces are surface finds. We have selected the sherds from surface finds with selective sampling especially the sherds of rims and bases which will represent the significance sampling for classification.

The following table shows the number and distribution of sherds found from the entire site of Kota Cina:

Location	Finds		Total
	surface	excavation	
KC. Surface	112	—	112
KC. I. B2	2	448	450
KC. I. C7	6	24	30
KC. I. C8	—	65	65
KC. I. F2	—	167	167
KC. I. I2	—	247	247
KC. I. I4-5	—	41	41
KC. I. I7	—	31	31
KC. IV. A1	—	55	55
KC. V. A1	—	807	807
KC. VI	10	332	342
Total	130	2.217	2.347

1.3 Classification of types

Fragments of foreign ceramics amount to above mentioned 2347 pieces, of which 1774 were used as samples for classification while the remaining 573 pieces could not be classified due to the small size, thus making it difficult to identify. The samples used for classification of types consist of sherds of rims, bases and some of bodies which represent the types.

We have compared the finds of ceramics of excavation 1979 with other finds of collection of the same material which are mentioned in some publications especially the classified ceramics by McKinnon in his publications (McKinnon, 1973, 1974, 1977b), a number of ceramics classified by McKinnon has lead us to the classification of types of ceramics from the excavation of 1979.

Based on the sample of the finds of excavation 1979, the classification of types is as follows:

1. Containers: consist of 9 types namely:

bowl	jarlet
dish	kendi (ewer)
coverbox	bottle
basin	stemcup
martavan (jar)	

2. Non container: decoration sherds.

During the excavation of 1979 we have found only one piece of ceramic in complete shape namely the lower part of a cover-box since the other remains were fragments of half-complete pieces or sherds.

The distribution of types of containers are in the following chart:

Location	t y p e s									Total
	bowl	dish	cover box	basin	jar	jarlet	bottle	ewer	stemcup	
KC. S4	36	27	8	—	23	4	7	6	—	111
KC. I. B2	84	66	6	4	124	20	42	1	1	348
KC. I. C7	9	5	1	—	7	—	2	—	—	24
KC. I. C8	11	7	—	—	21	—	4	—	—	44
KC. I. I7	35	19	4	1	42	16	5	—	—	122
KC. I. I2	8	5	1	—	12	2	—	—	—	28
KC. I. I4-5	40	10	4	3	64	33	23	—	—	177
KC. I. I7	9	3	—	—	11	1	5	—	—	29
KC. IV. A1	10	9	—	—	16	—	3	—	—	38
KC. V. A1	149	113	37	2	216	22	59	1	—	599
KC. VI	73	35	9	1	82	17	36	—	—	253
Total	464	229	70	11	618	115	186	9	1	1.773

From the abovementioned table it could be stated that the large number of the finds were fragments of jars, bowls and dishes. We can assume that people who lived at Kota Cina at that time had used these containers for their daily life as primary utensils. The people of Kota Cina who lived on the coastal area needed containers for drinking water. A large number of the finds were big jars or martavans. These containers were used by people as waterjugs. Fortunately, the site of Kota Cina has an abundant deposit of drinking water. The abundance of water can be found from the depth of approximately 0.75 meter below surface level.

1.4 The classification of wares

Among the amount of 2347 pieces, the sherds vary from high-fired earthenware to high-quality imported stoneware. Porcelain, stoneware and earthenware were distinguished on the basis of paste and secondary surface treatment (Miksic, 1979: 164). Zaini points out that distinction between stoneware, porcelainous stoneware and porcelain is not detectable by any but the most elaborate technical means and that not all ceramics experts agree on the exact point of division (Zaini with Harrison, 1967: 30). Some consideration on the classification of ceramic wares to be found in the excavation of 1979 is in the following:

1.4.1 Celadon

The most common porcelains to be found in Kota Cina phase assemblage are green-glazed wares conventionally termed celadon. Sullivan stated that celadon were the commonest Chinese export wares before the introduction of blue and white wares (Sullivan, 1961-1962: 67, Miksic,

1979: 70). Celadons to be found in Kota Cina originated mainly from Chekiang province especially of the Lung Chuan kilns. Lung Chuan celadons are mainly bowls and dishes.

1.4.2 *Ching-pai*

After the celadon, ching-pai ware made up the largest proportion of Chinese export porcelain during the Sung and Yuan dynasties (Sullivan, 1961–1962: 67). This ware is white glaze, and normally comes in the form of small, thinly potted objects such as coverboxes, jarlets and bowls. The finest quality specimen is so thin as to be translucent. In Indonesia ching-pai wares beside Kota Cina are found in Sulawesi and Bali (de Flines, 1975: 28); de Flines in his book did not mention about the find of Ching-pai even in Sumatra. This ware occurs also in the Philippines (Locsin, C and L, 1967: 88–97) and in Serawak (B. Harrison, 1962). In the Bujang site ching-pai is very commonly found (Lamb, 1961).

1.4.3 *Yellow-grey ware*

A number of yellow-grey wares found during the excavation were fragments of spouts, small bowls etc. This ware with underglaze incised designs can be attributed to the southern Sung dynasty. In his publication McKinnon shows a very fine sample of this ware. According to McKinnon as regards yellow-grey ware beside Kota Cina, only South Sulawesi is known to have the same specimen (McKinnon, 1977).

1.4.4 *Brown-glaze ware*

These wares are darkbrown glazed, consisting of mainly small bottles or small jars made of dark and grey porcelainous stone ware. These wares were found in the excavation of 1977 and 1979. One fragment of martavan of brown glaze with blue speck was found in the excavation of 1979. Mr. James Watt suggested it to be Cantonese ware of the 12th–14th century, very rarely found in any site in South East Asia. McKinnon in his publication (McKinnon, 1977) mentioned about the find of Temoku ware in Kota Cina, but unfortunately during the excavation 1977 and 1979 we did not find any Temoku ware.

1.4.5 *Green-glaze wares*

These wares are not porcelain, since they don't appear to

have been fired at a high temperature, necessary to obtain porcelain. They are very nicely glazed and are nearly all small molded pieces such as kendis and jarlets. One of the pieces of kendi is a fragment of a neck part found in Kota Cina. James Watt who had visited Amoy University and carried out some survey in Kwantung province has presented a new publication from Amoy University. In this book some photographs of kendi found in the kiln of Kwantung has a precise fragment which was found in the excavation of 1979. This kendi is molded with very fine green-glaze.

1.4.6 *Te Hua wares*

These wares are somewhat different from Ching-Pai (also white) glazeware, but have a coarser paste and less refined finishing than Ching-pai. Spur-marked bowls and small covered boxes are numerous among these wares found in the excavation. Many covered boxes have a molded decoration on the exterior. Most of the white wares are from the Yuan period. Wares of this group are also known in South Sulawesi, Borneo and the Philippines, (McKinnon, 1977 b, Miksic, 1979: 172). One piece of fragment of white ware not classified as Te Hua found in the excavation of Kota Cina 1977 can be identified as Northern Sung white ware. This plate has a special mark on the base of footrim on the interior. We found a complete piece of cover box Te Hua Ware of the Yuan period in site V. A1.

1.4.7 *Coarse stone wares*

These wares include all the coarse stone wares from very large to smaller, one consisting of still coarser jars and jugs. Most of the finds in the excavation which are coarse stone wares are flasks which McKinnon suggested to be containers for mercury liquid (McKinnon, 1973: 51, 1977 b).

1.4.8 *Fine paste wares*

One type of earthenware lies well outside the range of other types made with the paste technique. Very similar wares have been found on other South East Asian sites including the sites of Satingphra in Southern Thailand, in Kedah — North Malaysia and Sumatra. Miksic suggested that these wares are possibly imported to Sumatra (Miksic, 1979: 185), while Stargardt having seen the samples of the

collections from the excavation of 1977 in Medan in March 1979 suggested to the author that this ware originally came from the Satingphra site (South Thailand) of the 11th – 12th century. The paste of this ware is extremely fine untempered and of very pale colour. Miksic had tested the texture and specified the colour 10 YR 8/2 and 8/3 with specimen as dark as 5 YR 8/4, known as yellow to reddish-yellow on the Munsell soil colour charts (Miksic, 1979: 185). Most of the finds in the excavation 1977 and 1979 in this category are kendis.

2. Imported Chinese Ceramics in Kota Cina and Their Chronology

Imported ceramics especially Chinese ceramics constitute one of the most important archaeological evidence for the interpretation of the chronology of the site. Chinese ceramics are generally accepted by archaeologists as indicators for chronology. The find of Chinese ceramics in any archaeological site is helpful for dating the assemblage of the site. The local ceramics which could not be dated exactly, such as imported ceramics as Chinese ceramics, can now be dated by assemblage together with imported ceramics if this assemblage is not yet disturbed. On this point of view McKinnon in his first article on Kota Cina had suggested the chronology of the site as a T'ang-Sung site based on the finds of Chinese coins in Kota Cina which represent T'ang-Sung coins. In his article McKinnon mentioned the finds of 16 specimens of T'ang coins from 581–960 AD, 203 coins of Northern Sung from 960–1126 AD, 11 coins of Southern Sung from 1127–1264 AD. Unfortunately, the coins were not found in the assemblage of the archaeological excavation but were mostly surface finds, (McKinnon, 1973: 86). Later on, McKinnon revised the conclusion of the site of Kota Cina as being a Sung-Yuan trading site. He raised the theory in his article based on his finds of Chinese ceramic sherds of Sung-Yuan periode (McKinnon 1974:). The chronology of the Kota Cina site as representative of the Sung-Yuan period is reliable based on the assemblage of the artifacts to be found in Kota Cina. Afterwards the work in the field at Kota Cina carried out by McKinnon, the NRCA (The National Research Centre of Archaeology) has succeeded in collecting some charcoal from the excavation, to be tested in the Laboratory for Carbon Dating. The sample for C. 14 dating then sent to the Harwell Atomic Laboratory in London and the results of C. 14 dating represent the chronology of the 12th–14th century. The absence of blue and white ceramic sherds in the assemblage of Kota Cina suggest that this site was finished as a settlement of the

classical period of North Sumatra in the middle of the 14th century. As there are finds of more recent ceramics as well as ceramics of the Ching period of the 18th–19th century on the surface we can assume that the site of Kota Cina has been resettled again in the 18th–19th century.

Among the ceramologists as well as archaeologists who had participated in the team of the excavation of 1977 and 1979 are doubts about the exact chronology of the ceramic finds especially for separating between Sung and Yuan as a single sequence. Most of the finds identified as 12th–14th century Southern Chinese ceramics represent Sung-Yuan ceramics. A few numbers could be exactly classified as Sung and Yuan by the specification of the sherds.

Some considerations on the classification of ceramics from the excavation of 1979 are in the following chart.



LOCATION	Sung	Lung-Chuan Sung-Yuan	Sung-Yuan	Yuan	Te Hsu Yuan	Ching-Pai Sung-Yuan	Ching-Pai ching te-chen	Yuan Ming*)	Ming*)	Europe*)	Annamese*)	Unidenti- fied	Amount
KC. Surface	12	36	25	9	10	7	2	11	—	—	—	—	112
KC. I. B2	29	28	225	52	20	—	—	—	2	—	—	94	450
KC. I. C7	—	5	14	3	1	—	—	—	—	—	—	6	30
KC. I. C8	3	15	25	3	—	—	—	—	1	1	—	18	65
KC. I. F2	14	12	60	28	10	—	—	1	—	1	1	39	167
KC. I. I2	18	21	122	25	7	1	—	6	3	—	—	48	247
KC. I. I4, 5	—	9	3	12	—	—	—	—	—	4	—	9	41
KC. I. I7	—	8	16	4	—	—	—	—	—	—	—	3	31
KC. IV. A1	—	11	9	22	—	3	—	—	—	—	—	5	55
KC. V. A1	53	66	264	194	47	16	1	14	—	—	—	152	807
KC. VI	5	47	131	55	16	—	1	1	7	—	—	79	342
AMOUNT	139	258	894	407	111	27	4	33	14	6	1	453	2,347

*) Note: The fragments were found on surface finds or in the disturbed layers.

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CLASSIFICATION OF POTTERY FROM OLD BANTEN*

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Introduction

Earthenware artifacts have but rarely been the object of archaeological research in Indonesia. There are only prehistorians who have done this kind of research, namely: I.M. Sutyasa (1969 a; 1969 b; 1970 a; 1970 b; 1972; 1973; 1975), R.P. Soejono (1977), Gunadi (1970) and Santoso Sugondho (1978). Meanwhile, the classical archaeologists focus their attention mainly on large artifacts, statues and metal objects of art. This was the reason that pottery, which are not buildings nor statues and are not considered to be objects of art, have been studied only recently. This has happened in Trowulan and Rembang and Ratu Baka. Neither has there been a proper study of pottery on Islamic archaeological sites. In fact on nearly all archaeological sites there have been finds of pottery.

One such place of pottery distribution is Old Banten, situated in the district of Kasemen in the regency of Serang. This place is the old site of the capital of the Banten Sultanate from the 16th to the 18th centuries. (Uka Tjandrasmita, 1967: 8; 1967: 352) In 1976, 1977 and 1978 archaeological researches were carried out in this area. The excavations of 1976 were carried out on 3 sites, namely Sukadiri, Panjunan and Pakojan; in 1977 on 5 sites, to wit: Sukadiri, Surosowan, Kaibon, Pamarican and Karangantu, while there were excavations on the Pabean and Pamarican sites in 1978.

Earthenware Containers

Among the artifacts found in 1976 the objects consisted mainly of pottery. There were in 1976 still plenty of finds of pottery, as well as in 1978. Surveys carried out on the surface resulted in the discovery that the whole site of old Banten was full of pottery finds. This was considered to be of benefit for the research on pottery on an Islamic archaeological site. It was at this time that we had the opportunity of carrying out a research on pottery. This research was based on a few presumptions. Firstly, that a few Banten sites had been places of pottery manufacture in the past. Secondly that pottery had been used for consumption at the Palace as well as by the common people though many other kinds of containers which were better and finer such as Chinese ceramics were already widely known and used. Thirdly, that the pottery

* Original text in Indonesian, translated by the editorial board of the National Research Centre of Archaeology.

used by the village people and the inhabitants of the palace had been produced in these places of manufacture.

The pottery analysed is as follows:

Table 1 POTTERY EXCAVATED IN BANTEN

No.	year of research	t.p.	h.g.	total
1.	1976	16.686	12.914	29.600
2.	1977	362	3.090	3.452
3.	1978	92	3.429	3.521
	Total	17.140	19.433	26.573

As regards the analytical method used, besides the formal analysis, there was contextual analysis and ethnographical analogy which turned out to be useful as a contribution to the forming of a hypothesis (Mundardjito, 1977: 15). This kind of comparative data observation we also carried out in a place where pottery manufacture is still continuing to wit in the Gunung Tangkil area, at Leuwiliang, Bogor.

Of the pottery finds not all could be identified as regards their forms, as it were small fragments, which made it hard to analyse. The types of containers which could be identified, may be classified as follows:

1. Vessels (fig. 1 a)

These are open containers with a convex bottom, with a great variety of rims. The diameter of the mouth is between 30 – 45 cm. and the height of the body is about 15–20 cm. These containers were made with a slow wheel.

2. Saucers

This type was represented by two variations, to wit:

a. Round saucers. (pl. 1, b1)

It is a round open container with a rather convex bottom, the rims show little variation. The diameter of the mouth varies between 20–25 cm. while the height of the body is around 4–6 cm. A part of these containers were made by the paddle-and-anvil technique and another part with a slow wheel.

b. Square saucers. (pl. 1. b2)

Containers which are square with a footrim or without rims show little variation. These containers measure 34 x 50 cm. These were hand-modelled, and on the surface are distinct impressions. of fingers.

3. Jars

This type shows two variations in form, to wit:

a. Round jars. (pl. 1, c1)

Closed containers with round bodies with a footring, the rims show little variation. This kind of container measures around 8 x 10 cm. Manufactured by the slow wheel technique.

b. Cylindric jars (pl. 1. c2)

A straight upright standing round container with a level bottom; the rims show no variation. The body measures between 10 x 15 cm; made by the slow wheel technique.

4. Kendis (pl. 1. d)

Closed containers, round forms and long necks, used as water containers; the rims show plenty of variation. The body measures between 20 x 30 cm; while the mouth has a diameter of about 3–6 cm. Made by the slow wheel technique.

5. Flower vases (pl. 1. e)

Open containers with a form of a truncated cone; the bottom has legs, not many variation of rims. The body measures 30 x 20 cm and the diameter of the mouth is around 18 x 20 cm. Made by the slow wheel technique.

6. Pots (pl. 1. f)

Closed round containers with bottoms which appear to have been slightly convex; not much variation of rims. The measurements of the body are impossible to know as no fragments could be reconstructed. However, the mouths have a diameter which varies between 18–22 cm. Made by the slow wheel technique and some by the paddle – and – anvil technique.

7. Frying pans (pl. 2. a)

Open containers with a slightly convex bottom; not much variation of rims. The diameter of the mouths varies between 40–50 cm. The height was approximately 15 cm. This kind of object was made by the paddle – and – anvil technique.

8. Cooking pots (pl. 2. b)

Open containers of round shape with a slightly convex bottom; not much variation of rims. The diameter of the mouths varies between 54–74 cm. Made by the slow wheel technique.

9. Jars (pl. 2. c)

Closed round containers with a small mouth and apparently level

bottom; not much variation of rims. The entire measurement cannot be known; however, the diameter of the mouth varies between 18–20 cm. This type has been made by the slow wheel and by the paddle – and – anvil technique.

10. **Bowls** (pl. 2. c)

Small open containers of round shape and convex bottom, not much variation of rims. The entire measurement can not be known as there are not enough fragments for a reconstruction, but the diameter varies between 9–10 cm. This type was made by the slow wheel technique.

11. **Jugs** (pl. 2d)

Closed container of round shape with bottoms apparently convex; not much variation of rims. The entire measurement is not known, but the diameter of the mouth varies between 8–9,5 cm. Made by the slow wheel technique.

12. **Storing Pots** (pl. 2. e)

Large open containers of round shape and with an apparently level base; no variation of rims. The measurements of the entire pieces are unknown, but the mouth measure between 40–50 cm. Made by slow wheel technique and some by the paddle – and – anvil technique.

Besides these containers there are also non- containers, to wit:

Stoves

There are two different forms:

1) Stove with a projection on top. (pl. 3a)

This type is cylinder- shaped with a hollow lower part, whereas the upper part has projections which seem to have been used to put an object on top of it. Made by the paddle – and – anvil technique.

2) Stove with a concave pot (pl. 3b)

The difference with the first stove lies only in the form of the upper part which is slightly concave with holes. The diameter of the bodies varies between 20–25 cm. This type was made by the paddle – and – anvil technique.

Besides the fragments of containers and non-containers used for classification, there are also other fragments such as lids and spouts. Until now the measurement of the lids is still unknown as only the top of the spout has been found. This object functioned as cover of a larger object such as a frying pan or something of the similar kind. Covers like this we can still find being produced in a place where traditional pottery is still manufactured, to wit in Kasongan and in the village of Ngipoh (Central Java). The spout fragment perhaps belonged to a kendi with

spout of the same shape as ones found on the Borobudur compound (Mundardjito, 1978: 4). It is possible that this kind of cover may still be found on other sites.

The types mentioned above were nearly all reddish – yellow and yellowish brown, but one of these was brownish black, to wit a round saucer. The slip used was not peculiar; all the pottery were made from the same material as the containers. But the decorated containers are painted in a lighter colour than the original colour.

The thirteen types are not represented in an equal amount, the percentage is as follows:

1. Basin	79,47%	8. Cooking pots	1,66%
2. Saucers	1,92%	9. Jars	0,72%
3. Flower vases	0,74%	10. Bowls	0,02%
4. Kendi	1,00%	11. Vessel	0,38%
5. Flower vases	1,98%	12. Cooking pots	0,33%
6. Pots	9,33%	13. Stoves	0,64%
7. Frying pans	1,71%		

This comparison shows that the vessels are the most popular of the objects, whereas the least popular is the bowl. This is an interesting question whether the inhabitants of Old Banten used the vessels not only as water containers, as is usual among us Indonesians, but as another kind of container, for example for food. This has to be investigated in the future.

Decorative Motifs

Besides the plain pottery many decorated pieces were found in Old Banten in a rather high number, 913 pieces. The distribution is shown in the following table:

Tabel 2 DISTRIBUTION OF POTTERY IN OLD BANTEN

No.	Location	t.p.	h.g.	Total
1.	Sukadiri	151	250	401
2.	Surosovan	—	—	—
3.	Kaibon	7	2	9
4.	Pamarican	22	39	61
5.	Pakojan	—	—	—
6.	Pabean	5	338	343
7.	Panjunan	48	21	69
8.	Karangantu	—	30	30
	Total	233	680	913

The decorative technique used for the pottery were the incised, impressed, expressed motifs, by patting, application, carving and painting. By these seven techniques of decoration all kinds of decorative motifs have been produced which can be classified as follows:

- a. By the incision technique for which a sharp object was used, were produced: the following decorative motifs: leaf, tumpal, weaving, straight line, bows lines and dots, flower buds (7), and spirals (8).
- b. By pressing technique: in two different ways: Firstly by pressure with a stamp, were produced circles: plain (9), flower circles (10, 11, 12), plain circles and flower circles (13, 14, 15), flowers (16), half circles (17), plain circles and flowers (18). From the diamond motif were derived: flower diamond (19, 20), flower diamond and plain circles (21, 22, 23, 24, 25, 26) leaf diamond and plain circle (31, 32, 33, 34). From the square motifs were derived: flower square (35, 36, 37, 38), leaf square (39), leaf square (39), flower square and plain square (47), crossed square and plain circle (40, 41, 42, 43, 44, 45, 46), leaf square and plain circle (47), crossed square and plain circles (48), paralel square (49). From the sectagonal motif was derived a flower motif (50). From the tumpal motif was derived the dented flower tumpal (51), flower tumpal (52, 53), leaf tumpal (54), dented tumpal (55), multiple dented tumpal (56), leaf tumpal and plain circle (57, 58), multiple dented tumpal and plain circle (59, 60), multiple dented tumpal and square (61), multiple dented tumpal, half circle and plain circle (62, 63, 64), leaf, spiral, tumpal and plain circle (65), flower, tumpal and plain circle (66), dented tumpal and half circle (67, 68), tumpal and half circle (69), dents and half circle (70), dented tumpal and square and half round (71, 72), square dented tumpal and half round (73), dented tumpal, half round and plain circle (74), multiple dented tumpal, half circle and half round (76).

Another form of motif is the geometric round (77), shell (78), stylised human mask (79), slanting dents (80), slanting dents and half circle (81), slanting dents and plain circle (82), square dents (83), fire tongues (84), and parallel hearts (85).

The second pressing technique without a stamp produced the following motifs: flower (86), half round (87), parallel half rounds (88), parallel squares (89), parallel square and plain circle (90), ovals slanting in a row (91), slanting dents and plain circle (92, 93), pressed with finger (94), decoration obtained by pressure with a pointed object (95), slanting dents (96) dented tumpal and halfcircle (97).

With the impressing technique only the cord motif was produced (91). The patting technique produced a broom motif. (99). The applique'

technique produced two ways of decoration, namely one which used printing and the other without printing. The motifs obtained by printing are floral motifs (100, 101, 102, 103, 104), meanders (105), scrolls (106, 107), leaf (108, 109, 110), curly projections (111); The motifs obtained without printing are: rounds (112), chains (113), half-rounds (114) cord (115, 116).

The carving technique only produced leaves (11) and short lines on the spirals produced by applique' (118, 119). By the painting technique only parallel lines were produced. (120).

From the explanation above we may observe that there were 120 kinds of decoration employed in Old Banten. This number does not yet cover all the kinds of decorative styles on this site, but it is not impossible that there are even more. Of all these decorative motifs, the one which was the most popular was the motif, produced by stamp pressing, especially the motif of the dented tumpal.

This decorated pottery is mostly represented by small fragments which made it difficult for us to identify the form of the container. Therefore we have not been able to determine the type which was decorated. However, we may expect that in general the decorations were on the large containers, while there were only few decorations on the small containers.

Something very important was the find of some implements for the decoration of the pottery. These implements are made from earthenware and almost all are still intact. There are two kinds of implements, to wit: a mold for the application technique and a stamp for the pressing technique. After having found these two kinds of objects, we are convinced that the Sukadiri and Panjunan sites also produced the decorated pottery discussed above besides the plain containers.

Conclusion

Among the many problems of archaeological research in Old Banten, there are some which have already been solved. Firstly, in accordance with the assumption that in this area pottery manufacture used to exist there are certain facts to prove it. On the Sukadiri site, especially SKD XII and SKD XIV and the Panjunan site, there were many finds of pottery fragments concentrated in one place. Besides two kinds of pottery manufacturing implements were found, to wit: an anvil and the base of a wheel as well as implements for decoration, namely the mould and the stamp. (Mundardjito, 1978: 36). Considering these data, we may conclude that Sukadiri and Panjunan were sites where these earthenware objects were manufactured.

The pottery containers can be divided into 12 types, namely: vessels, saucers (round and square), jars (round and cylindrical), kendis, flowerpots, cooking pots, frying pans, jars, bowls, jugs, storing pots and another type, namely a stove. There are 120 kinds of decorative styles, made with seven decorating techniques, namely, carving, pressing, kneading, patting, application, carving and painting.

The second assumption that pottery had been used by the inhabitants of the Sultan's Palace as well as by the common people may now be accepted as a fact. For, the pottery fragments found on the sites of the palaces (Kaibon and Surosowan), and on the settlements (Sukadiri, Pamarican, Pakojoan, Pabean, Karangantu) and the sites of pottery manufacture (Sukadiri and Panjunan) show the same characteristics as regards the types and the decorative styles. Considering these data it is quite possible that the pottery containers used by the inhabitants of these places originated in Sukadiri and Panjunan.

The marketing of the pottery from those places of manufacture was not restricted to the settlements, but penetrated also the palace. Thus, though foreign ceramics were widely distributed and highly popular among the inhabitants of the palace and among the common people (Mundardjito, 1978: 54), the locally produced pottery was still used.

The problems solved during the pottery research in 1976, 1977 and 1978 are only preliminary results which have revealed something about the capital of Old Banten. It is felt that further excavations should be carried out on other sites in this area which have various characteristics of their own, in order to know the social and economic life in those days.

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PRELIMINARY NOTES ON THE CLASSIFICATION OF
THE CERAMICS EXCAVATED AT BANTEN
IN 1976 AND 1977*

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Banten situated on the west side of the island of Java, is at present known as a place with archaeological sites which have great potencies for archaeological research. This is due to the presence of many ancient monuments, such as the compound of the ruins of the Surosowan Palace, the Mesjid Agung (Great Mosque), the Tiyamah, the Tower, the canon Ki Amuk, the mosque of Pacinan Tinggi, the ruins of the Kaibon Palace, the Koja Mosque, the ruins of the Fortress of Speelwijk, the Chinese temple, the Watu Gilang, etc. (Mundardjito et al, 1978: 4-6).

Besides, there are many surface finds, consisting of artifacts of great archaeological value, such as pottery, ceramics, crucibles, coins etc.

The presence of these archaeological remains shows the past greatness of the state of Banten. This is also confirmed by data from written records on Banten. (Cortesao, 1941: 168; Meilink-Roelofs, 1962: 124, Uka Tjandrasasmita, 1975: 218-219).

The data collected from surveys and library study were used as a base for archaeological researches, carried out in Banten in 1968, 1976, 1977 and 1978. Above mentioned research took place on the compound of the Surosowan palace, in 1976 at the village of Sukadiri, at Pekojan, Panjunan and Banten Girang, situated about 12 kilometers south of the Old Town of Banten. The research of 1977 was carried out at Surosowan, Kaibon, Sukadiri, Pamarican and Karang Antu and in 1978 at the villages of Pabean and Pamarican.

Note:

- 1) Research was carried out in 1968 at the compound of the Surosowan Palace by the Islamic Archaeology Division of the Archaeological Service in cooperation with the Archaeological Department of the Faculty of Letters, University of Indonesia: as a result: the floor of the keraton was found and there were finds of European and Chinese ceramics. In 1976, 1977 and 1978

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there was again joint research carried out by the Islamic Division of the National Research Centre of Archaeology and the Archaeological section of the Faculty of Letters, University of Indonesia. The 1976 report has been published in the *Berita Penelitian Arkeologi* no. 18, while 1977 and 1978 reports are still in preparation.

The artifacts excavated are generally of the same kind such as pottery, ceramics, bricks, coins, beads, metal objects etc. The ceramics excavated in 1976 and 1977 are discussed in this paper.

Distribution of ceramics on the site in 1976 and 1977 is as follows:

Location	Surface	Spits	Total
Sukadiri 1976	838	1.281	2.119
Pekojan	21	19	40
Panjunan	364	41	405
Banten Girang	316	21	337
Sukadiri 1977	27	248	275
Surusowan	—	45	45
Pamirican	167	1.003	1.170
Kaiwon	39	131	170
Karang Antu	34	194	228
Total	1.806	2.983	4.789

For the typological classification only 2164 samples could be used, while 2625 were useless, being too small. Samples of ceramic fragments used here for typological purposes are in general fragments of rims, bottoms and a multitude of body fragments which we consider to be representative enough to give us information. Taking these above-mentioned samples as a starting point, comparing them with the ceramic objects of the same kind at the National Museum in Jakarta and at the Banten site museum, which happen to be still intact, the ceramic fragments turned out to consist at least of 12 types, namely:

a. Containers, consisting of 10 types.

1). Dishes; 2). Bowls; 3). Small boxes; 4). Flasks; 5). Jars; 6). Flower vases; 7). Cups; 8). Vessel; 9). Kendi; 10). Teapots.

b. Non- containers, consisting of 2 types:

1). Spoons; 2). Ornaments.

Comparing the number of types on each site:

Type	Location									Total
	SKD '76	PKJ	PJN	BG	SKD '77	SRW	PMR	KBN	KA	
Dishes	465	21	199	51	23	2	77	19	31	888
Bowls	511	18	201	110	41	5	121	23	34	1.064
Small boxes	71	—	—	4	3	—	7	5	8	98
Bottles	3	—	—	1	2	1	7	—	—	14
Jars	32	—	—	6	1	1	8	3	5	56
Flower vases	1	—	1	—	—	—	1	—	—	3
Cups	3	—	—	—	—	—	—	—	1	4
Basin	2	—	—	—	—	—	—	—	—	2
Kendi	4	—	—	1	—	—	—	1	—	6
Kettles	—	—	—	—	—	—	—	1	—	2
Spoons	17	—	—	—	—	1	5	2	2	27
Decorations	1	—	—	—	—	—	—	—	—	1
Total	1.110	39	401	173	70	10	226	54	81	2.164

Regarding these data shown above we may conclude that saucers and bowls are most represented types, though there are other types which are however less represented. Does this mean that these two kinds of ceramics were much used by the inhabitants of Banten as their daily household utensils in the past? It appears that the saucers and bowls had a primary function compared with the other types of ceramics.

Though only one ceramic piece which was still fully intact has been found during excavations and during the search for surface finds, we have been able to find the types and details of the ceramic fragments after making a reconstruction:

1. Type I: Saucers.

The diameter of the original saucers is between 10–40 cm. The form is very open, making it nearly level, with a round mouth. Most of the fragments are blue- and white, with a decoration of flowers, leaves and varigated with stripes. The basic colour generally used is greyish-white. These saucers could have functioned as food containers or as wall decorations. (?)

2. Type II: Bowls.

The bowls have a general diameter of 10–20 cm. The form: they are rather open and have a much thinner rim. Most of the fragments are blue- and- white, but there are some green celadon sherds among these. There are various decorations, among others: flowers, leaves and a variety of stripes; the material is greyish-white porcelain.

3. Type III: Small boxes.

These small boxes consist of two parts, namely the lower part (body) and the upper part which is the cover. The dominant colour is

blue- and- white, but there are also some polychromous sherds. There is floral- and leaf decoration and on some are human figures in combination with carved lines. This kind of small bowls were usually powder boxes or boxes to contain small pieces of jewellery.

4. Type IV: Flasks.

The flasks have an average height of 30 cm and a diameter of 8 cm. The mouth is round and thick- rimmed. The flasks are made of stone ware, the colour is yellowish and there is no decoration at all. This kind of flasks were used as alcohol containers.

5. Type V: Jars.

The jars have a diameter of 12–17 cm. The mouth is round, and the neck is short. The wall is thick; and the colour is brownish- black and brownish- yellow.

Some of these have handles or ears which are vertically placed and without decoration. The material is stoneware. These kind of jars were usually meant to contain water.

6. Type VI: Flower vases.

The bottoms of the flower vases have a diameter of 8–11 cm. They have the form of a small bottle with a small foot while the wall is widening upwards. The colour is blue- and- white while the porcelain is greyish- white. There is leaf- and floral decoration.

Besides, there are lids of vases which are still intact. The diameter is 4,5 cm, the height 3,5 cm and the form is octagonal. The top is a handle in the form of a cone, 1 m high. It has flower decoration varying with stripes. In the center of the inner side are hollow projections with circular holes.

7. Type VII: Cups.

The form is rather wide open with a rim which is growing thinner at the lips. The diameters are from 6–8 cm. On the bodies are handles. The colour is blue- and- white and the decoration is consisting of leaves and flowers. The material is white porcelain.

8. Type VIII: Jars.

These jars are similar to other jars and large jars. The diameter is between 9–13 cm. The colour is yellowish- brown and there is no decoration at all. These jars are closed with upright bodies and flaring rims. The material is greyish- white stoneware.

9. Type IX: Kendis.

The diameter of this type is between 12–16 cm. The body fragments are from the neck and the spout. The bodies are large and the necks are

long, as they are meant to be held by the hand of the user. On the body is the spout. The colour of these kendis is blue-and-white and there is floral and line decoration. The material is greyish-white porcelain.

10. Type X: Teapots.

The teapot fragments formed after restoration nearly one whole piece. The body is round with a handle on it. It has also a spout. The colour is brown and there is no decoration at all. The material is greyish-white porcelain.

11. Type XI: Spoons.

The body of the spoons measure about 3,5 cm and their length with the stem is about 0,5 cm. There are plain white and plain brown pieces. There is one spoon the stem of which has a linal decoration. Some fragments have sand on the reverse side. The material is greyish-white porcelain.

12. Type XII: Ornaments.

a. Ornament with a bird's head. It is 2,5 cm high and has a diameter of 2 cm. The neck is yellow up to the head while the beak is red, on the part of the head and the neck are vertical parallel stripes looking like bird feathers. This ornament apparently consisted of two parts which have been joined together.

b. Ornamental piece in the shape of an animal., It is 3 cm high and it is made of greyish white porcelain. As the fragment is very small it is hard to know how the actual decoration looked like.

Starting from the typological analysis above, we have made a chronological analysis, and have looked for the place of origin of the porcelain pieces. Regarding the material, form, decoration and colour of the ceramics, most of these appear to have come from China during the periods of the Five Dynasties, the Sung and Yuan dynasties, the Transition Period and during the period of the Ch'ing Dynasty. The other ceramics are from countries outside China, namely from Annam, Europe and Japan. (Heriyanti Ongkodharma, 1978: 55; Mundardjito et al, 1978: 45).

Below is a list of the places of origin and the periods of the ceramics discussed above. The Banten site we are discussing now comprises all the sites mentioned above, while Banten Girang is situated south of Old Banten town.¹⁾

Place of origin and period	Location of find		
	Banten	Banten Girang	Total
I. Chinese ceramics			
1. Five Dynasties	—	1	1
2. Sung Dynasty 960—1280	8	141	149
3. Yuan Dynasty 1280—1368	6	1	7
4. Ming Dynasty 1368—1644	402	108	510
5. Transition Period 1640—1644	1	—	1
6. Ch'ing Dynasty 1644—1912	3155	65	3220
II. Annamese ceramics XIV — XVI cen- turies	15	16	31
III. European ce- ramics XVII — XIX cen- turies	136	3	139
IV. Japanese ce- ramics XVII — XIX cen- turies	8	2	10
Total	3,731	337	4,068

This chronological classification shows that most of the ceramics found in Banten are from the Ch'ing period, which leads to the conclusion, that Banten (the old town) was inhabited from the 17th till the 19th century, whereas the ceramics from Banten Girang are from the Sung period. These data show that the site of Banten Girang is older than that of Old Banten. We know from written records that after the founding of

the Islamic State of Banten, the center of power which was originally at Banten Girang was transferred to the site of the Surosowan palace in Old Banten (Mundardjito et al, 1978: 1).

Though our classification has not yet tackled all the problems concerning the ceramics, we have tried to make a small contribution to the dating of several kinds of ceramics of Old Banten. As the dates of these ceramics are known now, the facts in the written records can be tested as regards the chronology of events. These two points may add to the problematics or support certain problems one faces during archaeological research.

NOTES

1. The Banten Sites are Sukadiri, Panjunan, Pekojan, Pamarican, Kaibon, Karang Antu, Surosowan, Banten Girang, 12 km south of Old Banten town.

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JAPANESE PORCELAIN FROM THE SEVENTEENTH CENTURY FOUND IN INDONESIA

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(Indonesia)

Introduction

This small illustrated monograph discusses the little understood seventeenth century Japanese export porcelain found in Indonesia and trade relations during that period. Traditionally, ceramics lovers here have ignored Japanese wares. Thus the Japanese ceramics in the Museum Pusat collections in Jakarta do not represent the variety on these wares found in Indonesia and few individuals have emphasized Japanese porcelain in their collections. However in the past several years this has changed. These wares have become popular and today very few excellent pieces remain available from Jakarta hawkers.

The recent popularity of these wares must be ascribed partially to publications on Japan ceramics excavated at the kiln sites in Arita in the 1950s and 1960s. This new understanding has led many, especially Japanese collectors, to seek out these ceramics which were made exclusively for export and are consequently rarely available in Japan. Excavations since 1976 by the Indonesian Research Center of Archaeology at the Banten site in West Java have found 17th century Japanese porcelain shards, which suggests the use of these wares during the same period.

Although the bulk of this ware was shipped to Europe, many pieces were exported to various towns in Indonesia and used by Dutch East India Company's employees and by Indonesians. Some shapes like kendis and covered boxes¹⁾ are believed to be especially made for the Indonesian market. These wares are commonly found in Indonesia²⁾.

Indonesian provenance is difficult, as controlled excavations are rare in Indonesia until recently. The only other sources of information at present are the antique dealers who assert that 17th century Japanese porcelains were often found as grave goods in South Sulawesi³⁾. But the condition of most Japanese wares leads us to believe that few were buried and that many were kept as heirloom pieces.

We are fortunate that Mr. Shindo, one of the Society's members, has shown considerable interest in Japanese porcelain from the 17th century and has developed a representative collection of these wares during his five year stay in Jakarta. This monograph is based on pieces in his collection, a few pieces from the Museum Pusat and the Museum Ke-

ramik Jakarta⁴⁾ and from private Jakarta collections. We have also included some references to pieces and shards found at the Banten site in West Java. Our dating relies mainly on Japanese sources.

Trade Relations With Japan

Japanese trade and communication with the Indonesian archipelago were quite insignificant in the early seventeenth century and were limited to northern Kalimantan (Borneo), northern Sulawesi (Celebes) and the northern Moluccas⁵⁾. During that time Indonesia had already established trade relations with China, Vietnam and Thailand which were the main ceramic producing centers.

The first intensive trade relation with Japan were initiated by the Dutch East Indian Company or Vereenigde Oost Indische Compagnie (VOC), which was founded in 1602 and obtained from the Dutch Government the monopoly in the trade with South East Asia⁶⁾. Almost from their arrival in the Archipelago the Dutch had a trading post in Banten (Bantam), West Java, some 100 Km west of Jakarta on the Java Sea.

Before the arrival of the first Dutch fleet under Cornelis Houtman in 1596, Banten under Sultan Hasanuddin (1552–1570)⁷⁾ was one of the principle pepper ports in Indonesia and the source of many commodities for Chinese traders⁸⁾. The Dutch thrust for monopoly in the spice trade caused problems with the Sultanate and in 1610 the Dutch opened a branch office in Jakarta. In 1619, the company's head-office was established there and from 1621 the settlement was named Batavia. In 1605 the Dutch had wrested Amboina from the Portugese, in 1624 they dislodged them from Java and in 1667 from Sulawesi, while in 1641 Malaka (Malacca) became a VOC possession. As the Dutch had expanded through the Archipelago Banten remained their chief competitor. Internal strife between Sultan Agung Tirtayasa (1651–1672) and his son Sultan Haji Abunhasri (1672–1687), caused the latter to turn for help to the VOC. On April 7th, 1682, Banten was taken by the Dutch⁹⁾, and they were masters of maritime Indonesia. The Dutch now became the chief purveyor of porcelain for the Asian as well as the European market. It is estimated that the Company at one time owned 150 merchant ships, 40 warships and had 10,000 regular soldiers stationed in their posts, such as Capetown, South Africa and Batavia¹⁰⁾.

In Japan the Dutch had a trading post at Hirado Island near Kyushu Island in the Japanese Sea, from 1609 until 1441 and at Deshima in the Bay of Nagasaki on Kyushu from 1641 until 1862. After 1641 the Dutch were the only European nation allowed to trade with Japan, which had important results for the history of porcelain manufacture and trade.

In China, the death of the Wan-Li Ming emperor in 1620, heralded the end of that 200 year dynasty, which ceased to exist officially in 1644. Internal strife accompanying the end of the Ming rule forced an end to the trade in export porcelain which the Dutch East India Company had enjoyed with China. The Dutch forced to turn elsewhere, by 1660 were acquiring almost all of their porcelain from Japan.

The official trade in Japanese porcelain for export to Europe by the VOC lasted only until 1683; the porcelain was too expensive and the Chinese kilns in Ching-te-Chen had again started producing for export¹¹⁾.

It should be remembered that the commerce in Japanese porcelain carried on by Chinese traders at Nagasaki was more extensive than the VOC's. During that period, in the 17th century when Ching-te-Chen did not produce enough to meet demand, the Chinese bought Japanese porcelain and transported it to Canton, Amoy, Ningpo, Patani and even to Jakarta¹²⁾.

Another way to obtain Japanese porcelain was from VOC employees in Nagasaki. In 1685, the system of free trade was introduced in Nagasaki. Under this system the company was allowed to purchase up to a maximum of 300,000 tael while individual Dutchmen were allowed to purchase 40,000 tael per shipment. This private trade called Kambang trade¹³⁾ was legal. This notwithstanding the VOC archives only lightly touch on it.

Hiroko Nishida who in 1974 wrote a thesis on Japanese porcelain during the 17th and 18th century has suggested that to help explain why so much Japanese porcelain is seen in private and museum collections in contrast to the relatively smaller amounts mentioned in the VOC archives, other, non-VOC, sources have to be explored¹⁴⁾. She investigated the Nagasaki custom archives and discovered that much more porcelain was exported by the company than was mentioned in its archives. In 1709 according to these Japanese sources, 82,275 pieces of porcelain were exported while Volker only mentioned 9,280. In 1711, 179,246 were exported on behalf of the VOC, while the VOC archives mention not a single piece¹⁵⁾.

After its founding on Formosa in 1624, Zeelandia became the center of the company's porcelain trade until its closure by Coxinga in 1662¹⁶⁾. From Formosa porcelain was shipped in Dutch ships and in company junks to Batavia. In Dutch ships it was carried to all the offices of the Company outside the Archipelago. The interisland trade was mostly carried by 'Indonesian' vessels¹⁷⁾. To show the extent of the porcelain trade in the Archipelago we have listed the ports and places of destinations as mentioned by Volker¹⁸⁾.

Early Japanese Porcelain

The Dutch established a trading station at Hirado Island, off the western-most tip of Kyushu Island in 1609. This is several years before 1616, the traditional date when the Korean potter Li Sampei supposedly made the first Japanese porcelain in Hizen province near Arita town on the southern-most Japanese main island of Kyushu. The early Hizen wares, none of which apparently were contemporaneously imported in Java, were akin to contemporary Korean blue and white underglaze wares. They should be distinguished from the more sophisticated Japanese products that were made after the middle of the 17th century¹⁹⁾ in the Arita area.

The Japanese wares found in collections here and at the excavations at Banten, by the Research Center of Archaeology from the second half of the 17th century are undecorated white, underglaze blue and overglaze enamelled wares. Overglaze enamel wares were produced after the 1650s in Japan²⁰⁾ and such wares are reported by Volker as being imported in Indonesia.

The more sophisticated wares of the third and fourth quarters of the 17th century found to-day in Indonesia are believed to be all Arita district kiln products. Correctly they should simply be known as Arita wares. However, we identified two types of Arita wares-Imari and Kakiemon.

Numerically the most common is the Imari Type. Imari of course is the port town for the nearby potting district of Arita. Imari, although never a ceramic making center, gave these vigorously decorated wares their famous name. For many foreigners and Indonesians, Imari has come to refer to the popular dark blue underglazed ware with quickly drawn brocade-patterned red and gold overglazed enamel colors. However, Imari also refers to an underglaze cobalt blue ware typically relatively stoutly potted with a fairly thick glaze which can run light greenish blue where it gathers. The glaze is clear, off times with kiln grit and pitting. This ware is also known as Ko-Imari or Old Imari. The underglaze blue is rich with shades varying from a greyish blue to a clear medium blue and to an almost inky dark lavender tone. These underglaze blue Imari wares are characterized by quickly done often sloppy brush work. Typical decoration includes late Ming and transitional 17th century Chinese designs which are adopted, transmogrified and often made Japanesque. The development of late Ming style decoration into typical Japanese style is shown by plate no. 13 until no. 18.

Another large influence on the Japanese decorators of wares is the 17th century southern Chinese-made kraak ware (which takes its name

from a contemporary Portuguese sailing vessel) often has a landscape with animals in the interior center, accompanied with eight radial panels with floral design or eight precious symbols separated by thinner bamboo radial motives. The Imari foot while usually clean can have grit adhering; most examples have spur marks²¹). A few 17th century Imari enamel overglaze wares are in Jakarta collections. They probably arrived here in contemporary times.

The less common Kakiemon type of Arita export ware has a fine body and superior decoration in the well known delicate Kakiemon style. This is a more refined ware than the Imari type; in it one sees finely drawn floral forms with rock, bird and butterflies placed asymmetrically against open space. See photo number 19. No 17th century Kakiemon enamel wares were discovered in Indonesia during preparations for this paper; all examples are blue and white underglaze Kakiemon²²).

According to Volker over 80 shapes of Japanese-made porcelain were shipped by the VOC to Batavia, and further west²³). Many of these shapes are purely European in design and concept, such as beer mugs. These were ordered by VOC agents in Deshima who furnished European-made models of wood and other material²⁴). Of these 80 some shapes recorded in VOC archives, only a handful are present in Jakarta Museums and private collections²⁵).

Footnotes

1. See kendi No. 3 and covered box No. 20.
2. This information came from Mr. Shindo who saw many kendis and boxes when he first started collecting. All the kendis illustrated in publications in Japan mention Indonesia as the place of origin. Hiroko Nishida in her book on Ko-Imari, *Nippon Toji Zenshu* vol. 23 Tokyo 1976, page 69, mentioned also that boxes are found in abundance in Indonesia.
3. The *Berita Penelitian Arkeologi* No. 3 (Bulletin of the Research Centre of Archaeology), 1976 on survey in Minahasa, North Sulawesi as reported by Drs. Hadimuljono et. al. Several Japanese shards were found in the Waruga (prehistoric stone grave) complex together with Chinese shards dating from the Sung to the Ching period. No information was supplied concerning the approximate dating of the Japanese shards.
4. The Museum Keramik Jakarta is situated at the Jakarta Fine Arts Gallery (Balai Seni Rupa) at Jalan Fatahillah, Jakarta-Kota. It was inaugurated in June 1976 and is a joint cooperative effort between the Municipal Government of Jakarta and the Ceramic Society of Indonesia. The Adam Malik collection of Chinese ceramics forms the major collection of this Museum.
5. E.W. van Orsoy de Flines, *Guide to the Ceramic collection, Museum Pusat, Jakarta*, 3rd edition English translation, Jakarta 1972, p. 55.
6. H.J. de Graaf, *Geschiedenis van Indonesie*, s'Gravenhage/Bandung 1949, p. 145.
7. *Ibid*, p. 114. The arrival of the first Islamic ruler, Sunan Gunung Jati, occurred about 1524–1525. At that time the region of Banten was still in the possession of the Sundanese kingdom of Pajajaran. Sunan Gunung Jati who left Banten in 1552 and settled in Cirebon, ordered his son Hasanuddin who became the first Sultan in Banten (1552–1570) to move the capital of Banten to Surosowan.
8. D.G.E. Hall, *A History of South-East Asia*, third edition, London, 1968, p. 278.
9. H.J. de Graaf, p. 114.
10. Martin Lerner, *Blue & White Early Japanese Export Ware*, The Metropolitan Museum of Art, New York, 1978.
11. T. Volker, *Porcelain and the Dutch East India Company*, second edition, Leiden 1971, p. 174.
12. C.J.A. Jorg, *Porcelain als handelswaar*, Proefschrift, Groningen 1978, p. 96.

13. The translation of "Kambang" was not mentioned by Jorg. According to Mr. Shindo, Kambang in Japanese means a shop sign board.
14. T. Volker 1971, p. 172, mentioned that Japanese porcelain did not find a very good market in Europe for no considerable quantity was imported there. A total of 190.000 pieces over a period of 23 years is given.
15. C.J.A. Jorg, p. 97.
16. T. Volker 1971, p. 9. The Ming partisan Cheng Cheng-kung who held out against the Manchu tide (Ching dynasty). In 1662 he took Formosa from the Dutch to serve as his stronghold against the pressure of the Manchu. His title given by the last Ming emperor was "Kuo hsing yeh" which was corrupted by the Portuguese and the Dutch into Coxinga.
17. Ibid, p. 24.
18. Ibid, p. 193–222. Those places include Aceh, Baros, Jambi, Indragiri, Palembang, Padang, Indrapura, Lamenjuta, Sikil, Bengkalis, Lampung and Pedir in Sumatra. Ports of Java were Banten, Cirebon, Tegal, Losari, Pekalongan, Jepara, Indramayu, Juana, Ciasam, Kudus, Gresik (Grissee), Surabaya. Ports in Kalimantan include Sukadana, Martapura, Banjarmasin and Tanjungpura. Sulawesi had Makasar and Tombo. Other destinations were Banda, Bali, Lombok, Sumbawa, Ambon, Ceram, Ternate and Ambon.
19. Our investigations turned up no early Hizen wares (1616–1650's) in Jakarta collections. Arita kiln products made after the middle of 17th century are widespread and still available locally from Tukangs (hawkers). For a good description of early Hizen wares see Plates 1–13, Pope and Cleveland.
20. Pope, John and Cleveland, Richard, 200 Years of Japanese Porcelain, 1970, p. 12.
21. Spur marks are the remainder of a support (pontill) used to separate wares while they were fired, so the glaze would not run from one piece into another gluing the two together. In Arita there were two ways of firing. One is called Namagake or single firing; here the biscuit is painted and glazed and then fired slowly to about 1,300° C. The other is Suyakigake, in which the biscuit is first fired to 700° C, then painted and glazed and refired to 1,300° C. The first method is Chinese in origin. But as the clay used at Arita is highly refractory, the biscuit ware can shrink as much as 20% from its original, size, which, of course can distort the shape of the vessel. The twice firing method was developed at the end of the 17th century to avoid

this, and to make a fine porcelain. These spurmarks are a distinctive mark of Japanese porcelain. When the design and manufacturing technique produces a piece resembling in every part a Chinese late Wan-Li piece, as illustrated in No. 12, the spurmarks are convincing evidence of a Japanese origin. Chinese blue & white was hardly ever fired on spurs and the presence of spur marks thus provides a good indication of provenance (S.H. Garner p. 68).

Among Indonesians who still own Japanese pieces as a much treasured heirloom piece, the number of the spurmarks is often a sign of age and quality. On a recent visit to the Sultanate of Kanoman in Cirebon, West Java, we were told that among the heirloom ceramic dishes, many of which are believed to have some magical power (*panjang jimat*), there is one with 12 spurmarks or "paku", their local name. Also see *Sejarah Nasional 1977*, 3rd. volume p. 233, edited by Uka Tjandrasasmita.

22. Mr. Shindo states having seen one enamelled Kakiemon late 1978 of a similar size as No. 19. Cleveland, Richard S. & John Pope, p. 12. The traditional discoverer of the technique of adding overglaze enamels was a potter of the Sakaida family in Nanganwara who is said to have fashioned a cabinet ornament in the shape of a pair of persimmons (*kaki*), so delighting the Lord of Nabeshima that he nicknamed Sakaida Kizaiemon "Kakiemon". Several other versions exist, but none are supported by incontrovertible evidence.
23. Volker, p. 174–175. See Appendix.
24. *Ibid.* p. 119.
25. Examples of dishes with VOC letters are not included but Orsoy de Flines (p. 57) mentioned that the VOC plates appear almost exclusively in and around places where the Company was established: Jakarta (Batavia), Banten, Palembang, Cirebon, Semarang, Banjarmasin, Ujung Pandang (Macassar), Ambon and Ternate. A few pieces were found in Bali.

Appendix

Shapes of Japanese porcelain shipped by the VOC to Batavia, from Volker p. 174–5. Gallipot (medicine flask), phial, pot for preserves, coffee cup without foot, coffee cup with foot, bowl, dish, nearly flat plate, jug, tea cup with foot, plate or dinner plate, large deep dish, wash basin, octagonal tea cup, foot dish (saucer dish), food dish with narrow rim, plate used with tea bowl, incense pot, jewel box, bottle, poured flask, bagyne cup, (a small shallow bowl/porringer), beer jug, rolwagen (Cylind-

drical vase), leafplate, oblong and square plate, covered butter pot, focktie fokien (perhaps a box, Volker 1971: 148), fatsenback (a square covered box), hexagonal liouback (a multi-tray food container), pepper and salt box, small deep saucer, oblong box, bulgy saucer, small deep dish, cup and saucer, round box, small mug, vogeltien, spouted jar, square butter pot, flower pot, butter dish, butter box, wine jug, snelletje (covered smaller beer mug), oil and vinegar jar, covered pot, jar, flower flask, square & round censer, small round embossed box, statuette, small embossed cup, heron box (probably a small box) little swallow (probably a small box), statuette with tortoise, tortoise, spouted jug, large flacon, square and round flask with narrow neck, round and oblong butter box, kendi (gorgelet), salt cellar, large pot for preserves, bottle with screw top, shaving basin (a plate with large segment taken out of rim), tea cup straight walled without flaring rim, long necked flask, rice bowl, flat salt cellar, medicine cup, flat wash basin, show pot for cabinet, small covered medicine noggin, covered bowl, round tea pot, flask with long foot.

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For other references see the footnotes.

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Uka Tjandrasasmita,
1977

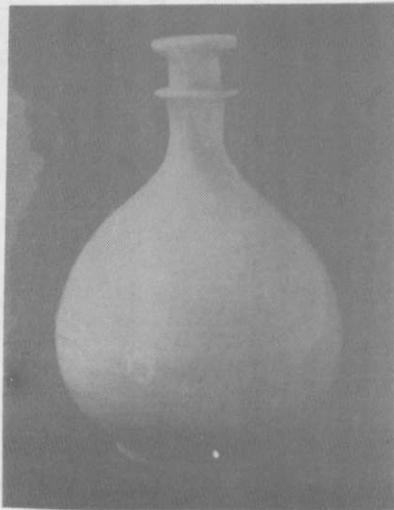
Sejarah Nasional Indonesia III. Balai Pustaka,
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1. APOTHECARY'S BOTTLE OR GALLIPOT

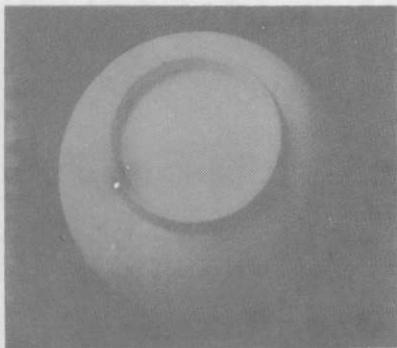
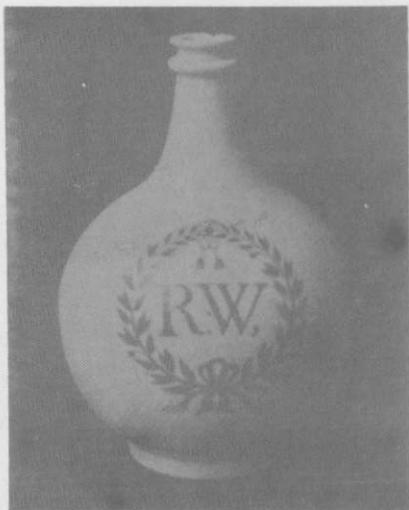
Arita export ware, 17th century
Porcelain white monochrome
Height 17 cm
Collection Museum Keramik Jakarta
Gift of Vice-President Adam Malik, 1979.

Reference

The apothecary's bottle was the only item mentioned in the first documented export from Japan to Batavia. A letter from Deshima to Formosa dated November 12th 1653 reported a shipment of 2.200 porcelain gallipots for the apothecary's shop in Batavia (Volker 1971: p 125). Their shapes probably derive from German or Dutch stonewares (Martin Lerner, 1978).

Although they form a homogenous group it is not known if they were made early or late. In 1717 another shipment of gallipots was recorded (Martin Lerner, 1978).

Galli is probably a corruption of Galheta, Portuguese for small jug. In 1637, a bill of lading of a Portuguese prize mentioned a basket with gallietes (Volker 1971: p 197).



2. GALLIPOT

Arita export ware, late 17th century
Porcelain with underglaze blue initials R.W. wreath
decoration, with a second rim slightly below the lip
of the vessel; the base is glazed and foot rim
unglazed.

Height 24 cm. Found in Sulawesi.
Mr. and Mrs. Shindo's collection.

Reference

The initials R.W. suggest that this pot was made
for the person whose initials are R.W.
Gallipots with the following initials are known:
P.V.D., P.V. or P.W. (British Museum);
I.V.H., I.S. (Rijks Museum Leiden); P.D.
(Mayuyama, Tokyo); L.V.R. (Groningen
Museum); V.O.C. (Stedelijk Museum, Leiden);
I.C. (The Cleveland Museum of Art, The
Princesshof Museum, Leeuwarden, Victoria
Albert Museum, and the Honolulu Academy of
Art).



3. KENDI

Arita export ware, 17th century
 Porcelain with underglaze blue decoration.
 On the fluted body is a continuous landscape
 decoration in the late Wan Li kraak style. The
 glazed base has an unglazed rounded footrim.
 Height 22 cm, found in South Sulawesi.
 Collection Museum Keramik Jakarta.
 Gift of Ceramic Society of Indonesia.

Reference

The same kendi or gorgelet (Volker 1971:19)
 but with silver mountings is illustrated in Volker
 p.28.

The kendi, a drinking vessel, seems to be a
 South East Asian evolution from early Indian
 vessels. It became one of the standard export
 types made in China since Ming times
 (1368-1644) for the South East Asian markets.
 According to C.J.A. Jörg (1978:167), kendis
 might be used exclusively in Indonesia and were
 only brought to Europe as private possessions.
 The fact that kendis appear often in Dutch
 seventeenth century paintings show its
 popularity in those times as an exotic object
 from the Orient.



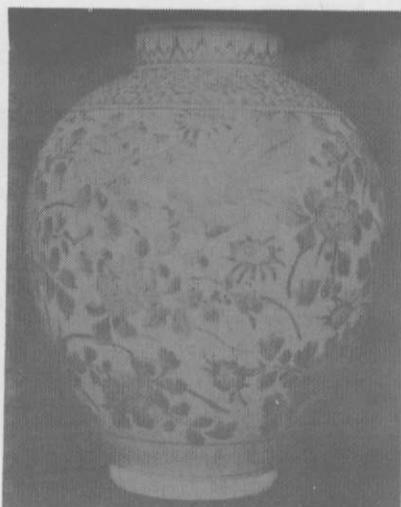
4. KENDI

Arita export ware, 17th century.
 Porcelain with underglaze blue decoration, on the
 fluted body is a continuous landscape decoration in
 the late Wan-Li style. A stylized tulip motif shows
 on the neck.
 Height 21 cm, found in Surabaya, East Java.
 Collection Mr. and Mrs. Shindo.



5. KENDI

Arita export ware, late 17th century.
 Porcelain with underglaze blue decoration. The
 continuous landscape on the body is in the style of
 Wan Li. The carved metal mountings are typical of
 the embellishment used by Indonesians on kendis
 until the early 20th century. This kendi has a fully
 glazed base with an unglazed footrim.
 Height 16,5 cm, found in South Sulawesi.
 Collection of Ambassador and Mrs. Hidemichi Kira
 of Japan.



6. JAR

Arita ware, 17th century, traditional Chinese influenced Imari style.

Porcelain with underglaze blue decoration, the body with three phoenix between peony flowers under a border of lotus scrolls. The high neck has an unglazed rim. The lower part of the body is crackled through age, with a glazed base and unglazed rounded footrim. The inside of neck partly glazed. Height 26 cm, found in Cirebon, West Java. Museum Pusat collection no. 813 MP.

Reference

The high neck, egg shaped body and rounded footrim are typical of early Arita jars. These jars are usually under 27 cm because the clay used at Arita wares is highly refractory, the appearance of the larger sized Arita jars were after 1673 and denotes technical improvement. S. Yamashita, *Shoki ko Imari (Early Imari)*. Tokyo 1975, p. 256.



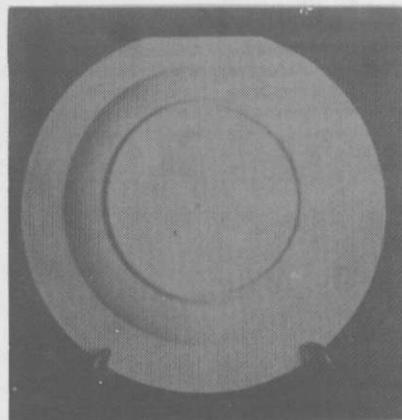
7. JAR

Arita export ware, late 17th century.

Porcelain with underglaze blue decoration in Japanese style with a pine and willow design. The rim of neck is unglazed and the glaze is crackled through age, with a glazed base and unglazed rounded footrim.

Height 22 cm, found in Palembang, Sumatra. Museum Pusat collection no. 804 MP.

In comparison with Jar No. 6, this piece shows later Arita characteristics in the low neck and angular shoulder shape; also the design is already typically Japanese.

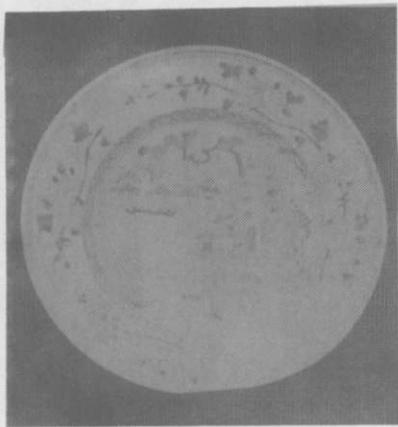


8. DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration.
The center showing two ducks with flowering plants encircled by a diaper pattern. The cavetto displays three finely drawn chrysanthemum sprays. The glazed base has 5 spurmarks. This is an exceptionally fine example of export ware, but unfortunately it is cracked. Diameter 41,5 cm. Found in Lampung, South Sumatra. Collection Museum Keramik Jakarta. Gift of Ceramic Society of Indonesia, 1979.

Reference

A similar piece is illustrated in T. Nagatake, Toji Taike vol. 19, page 100.



9. DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration.
The potting and decoration technique are similar to plate No. 8. The center with a sea-shore landscape of rocks, a house and a boat is encircled by a diaper pattern. The cavetto has two lotus and two peony sprays. The spurmarks on the base have been ground; probably this was done to pass it off as a Chinese piece. Diameter 33 cm. Found in Surabaya. Collection Mr. & Mrs. Shindo



10. DISH

Arita export ware, late 17th century.
Porcelain with underglaze grey blue decoration in late Wan-Li kraak style. The center displays a vase with flowers, with a glazed base showing three spurmarks. The back shows two leaf scrolls and three decorative bands. The glazed base has four spurmarks.

Diameter 28 cm. Found in Kalimantan.
Collection Mr. & Mrs. Shindo.

Reference

The border decoration closely follows Wan Li period kraak export porcelain. The central symmetric flower design is a common motif on Arita early export ware. Shards with similar border decoration and birds in the center are found at the Banten site (Surosowan) West Java. See also plate No. 61 of Martin Lerner, 1978.

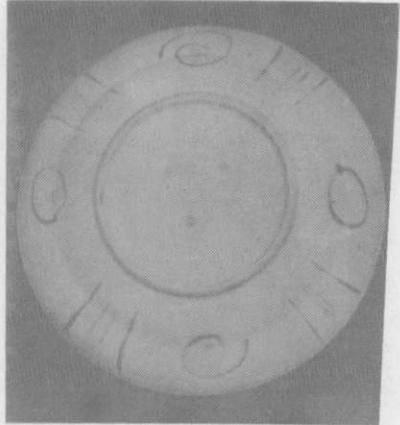


11. DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration.
The center showing a vase decorated in Japanese style with flowers; the border having kraak ware type decorations. The glazed base shows three spurmarks.

Diameter 35.5 cm. Found in Banten Lama, West Java.

Museum Pusat collection no. 3966 MP.



22. SMALL DISH

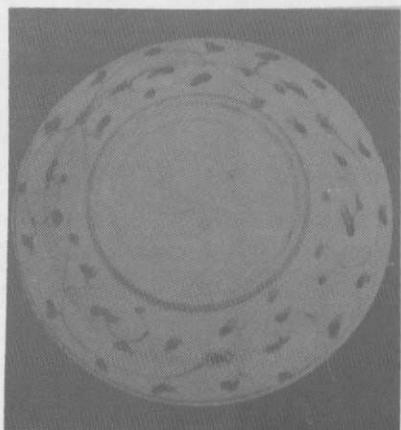
Very fine Arita export ware, late 17th century. Porcelain with underglaze blue decorated in late Wan Li style. The center with a duck amidst foliage; the rim is scalloped. On the back side is a geometric pattern and the glazed base shows three spurmarks.

This piece in decorative concept and feeling is wholly kraak ware. However, its more robust potting, spurmarks, fine glaze and flattened foliate edging mark it as Japanese Arita ware.

Based on our experience all dishes of this type are of the same or smaller diameter.

Diameter 21 cm.

Collection Mr. and Mrs. Shindo.



14. SMALL DISH.

Arita export ware, 17th century.
Porcelain with underglaze blue decoration in the late Wan Li style, but with Japanese influence of cherry blossoms and chrysanthemum sprays. The back side shows a geometrical pattern, with three spurmarks on the glazed base.

Diameter 21,5 cm.

Found in Palembang, Sumatra.
Collection Mr. and Mrs. Shindo.

13. SMALL DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration, in late Wan Li kraak style. The center shows a flying insect. The back has a broad flower scroll and decorative bands. The glazed base has three spurmarks.

Diameter 21,5 cm.

Collection Mr & Mrs. Shindo.

reference

A similar plate is illustrated in Martin Lerner's catalog 1978 plate no. 63.

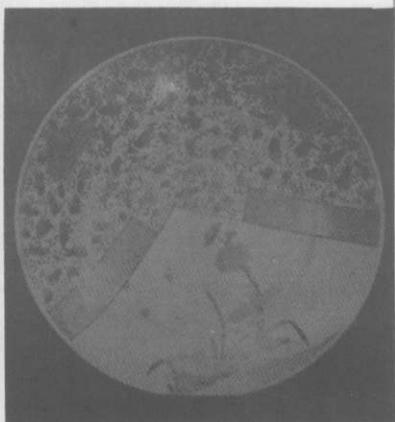


15. DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration. The border shows a Japanese style decoration with two fan-shaped cloud panels on a peony scroll pattern. The center has a typical Arita export design for the European market.
Diameter 27,5 cm.
Collection Mr. and Mrs. Shindo.

Reference

A similar piece is illustrated in *Nippon Toji Zen Shu* No. 23, *Ko-Imari* (Early Imari) by Hiroko Nishida, Tokyo 1976.



16. DISH

Arita export ware, late 17th century.
Porcelain with underglaze blue decoration. The dividing of the surface is typically Japanese. One part shows a peony scroll pattern with two peonies and the second panel displays a chrysanthemum flower arrangement.
Diameter 27,5 cm.
Collection Mr. and Mrs. Shindo.



17. DISH

Arita ware, late 17th century.

Porcelain with underglaze blue decoration having attractive unusual decorations in Japanese style with Chinese influences, as shown by the three peonies. The rim and cavetto have three heart shaped panels with flower sprays, on a peony scroll, separated by three peonies. The back shows a continuous chrysanthemum scroll and two decorative bands. The base has 5 spurmarks. This is an uncommon export design.

Diameter 32 cm.

Collection Mr. and Mrs. Shindo.



18. DISH

Arita export ware, late 17th century.

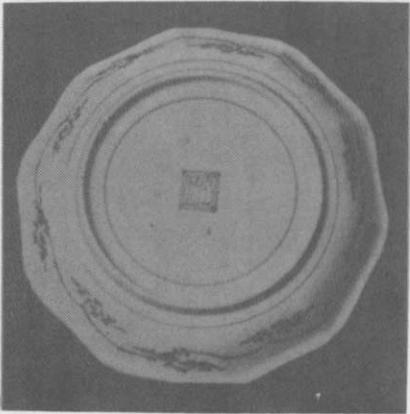
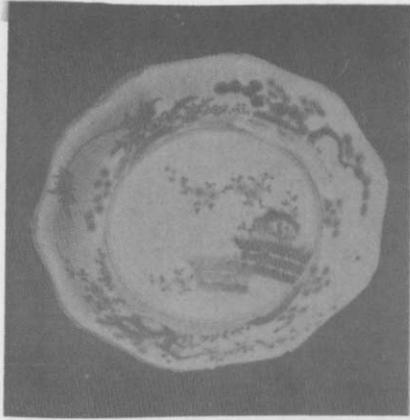
Porcelain with underglaze blue decoration in Japanese style. The central asymmetrical design of two deer under a prunus tree shows Kakiemon influence.

Diameter 32 cm.

Collection Mr. and Mrs. Shindo.

Reference

As described by T. Nagatake in *Toji Taikei*, Vol. 20, Tokyo 1973 p. 81



19. LOBED DISH

Arita export ware in Kakiemon style, 17th century. Porcelain with underglaze blue decoration. The central design displays two straw fences (shibagaki) with prunus branches. The border is decorated with pine and bamboo trees. The back has a continuous scroll design with decorative band. The glazed base shows a Fuku mark and four spurmarks. Diameter 24 cm.

Collection Mr & Mrs. Shindo.

Reference

A similar plate of smaller size is exhibited in the Ceramic Museum of Jakarta (Museum keramik Jakarta), gift from Mr. & Mrs. Adnan Kusuma.



20. COVERED BOX

Arita export ware, 17th century. Porcelain with underglaze blue decoration. The central decoration of the cover has a peony spray encircled by a leaf border. Diameter 12.5 cm.

Collection Mr. & Mrs. Shindo.

Reference

This is one of the earliest examples of Arita ware in imitation of the Ming boxes. They are commonly found in Indonesia. Similar boxes of smaller size are used for incense in Japan. In Indonesia these boxes are called "tempat bedak" or powder boxes; its uses here however are more varied. According to local sources in South Sulawesi these boxes were used as containers for jewelry and incense during traditional ceremonies and were also very popular as a collector's item. These boxes must be what the VOC archives, listed as "boreh-boreh" boxes (Volker 1971, p 53). because in Indonesia this term refers to wet powder.

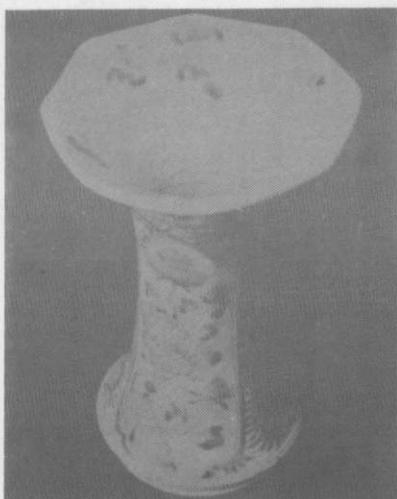


21. VASE WITH FLARED MOUTH

Arita export ware, late 17th century; the shape of the vase is Chinese of bronze Ku shape. Porcelain with grey-blue underglaze decorations in Japanese style, with two panels on the body, one with a peony design and the other showing a phoenix on an empress tree (paulownia), separated by a peony scroll pattern. Two peony sprays are drawn on the inside of the mouthrim. Diameter 14 cm, height 23 cm. Found in Surabaya, East Java. Collection Mr. and Mrs. Shindo.

Reference

Mr. S. Yamashita, 1975 plate 44. This shape is already included in the ceramic shapes used for tea ceremonies in the 17th century. See Chatou Midokoro (list of tea ceremonies) 1975, p 119.



22. URINE OR WATER POT

Arita export ware, late 17th century. Porcelain with underglaze blue decorations of flower sprays on the body, on the flaring lip is an unglazed band. Diameter 21 cm, height 13 cm. Collection Museum Antwerpen, Holland.

Reference

This picture is taken from Volker (plate no. 37) as a reference to a similar (broken) pot found at the Banten Site (Surosowan) in West Java, during the 1976-1978 excavations, now exhibited in the planned ceramic museum in Banten.



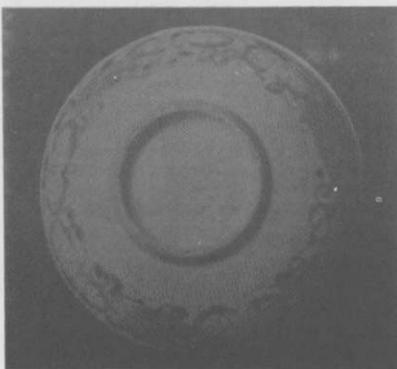
23. COVERED BOX

Arita export ware, 17th century.
Semi-porcelain with floral design in overglaze blue, turquoise and red enamel.
Diameter 11 cm.
Collection Museum Keramik Jakarta.
Gift of Mr and Mrs. Adnan Kusuma.

Reference

This is one of the earliest examples of Arita enamelled ware. A similar box is illustrated as early Imari in Hideo Tagai, Japanese ceramics, translated by John Clark, second edition, Osaka 1977, page 81.

A similar box is included in the Museum Pusat collection.



24. COVERED BOX

Arita export ware, 17th century.
Porcelain with enamel decoration in red, blue and turquoise blue in Japanese style of chrysanthemum flowers. The cover has a button-shaped knob. The inside of cover and box are unglazed around the rim.
Diameter 11,5 cm. Height 11 cm.
Found in Padang, West Sumatra.
Museum Pusat collection No. 3235 MP.

Reference

Hiroko Nishida, Nihon-no Yakimono, Tokyo 1977, page 23.



25. DISH

Arita export ware, late 17th century.
Porcelain in red, blue and turquoise blue enamel decoration in late Wan-Li kraak style, with a fully glazed base showing a single spurmark and an unglazed rounded footrim, at the back a sketchily drawn chrysanthemum scroll.

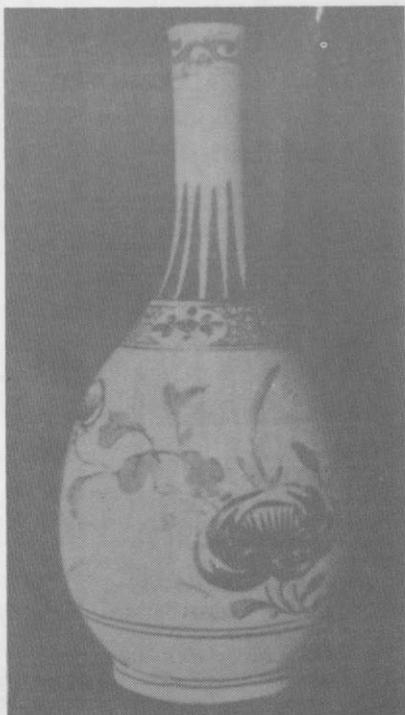
Diameter 32cm.

Found in South Sulawesi.

Museum Pusat Collection No. 791 MP.

Reference

The turquoise blue decorations is reminiscent of Swatow polychrome dishes with turquoise blue. The border decoration closely follows Wan-Li period export porcelain designs. The central symmetrical flower design is also a common motif on Arita early export wares. These styled plates are sometimes called "Kakiemon" which is the survival into our day of the belief that the early enamelled wares were produced by the Kakiemon kilns. In the collection of the Genemon shiryo-kan gallery in Arita is another, similar size with the same design. Illustrated in plate no. 32 by Hiroko Nishida, 1974, also bought in Jakarta.



26. VASE

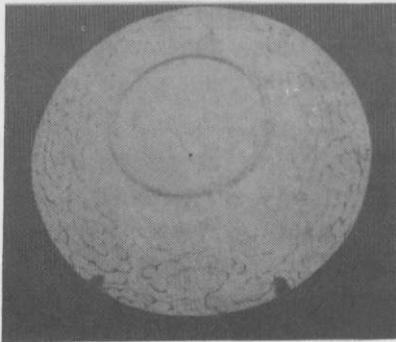
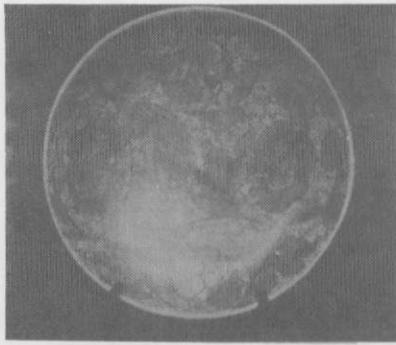
Arita export ware, late 17th century.
Porcelain with enamel decoration in red, turquoise and yellow with a chrysanthemum scroll on the body. The vase has a Korean shape and might be an example of the earliest enamel ware.

Height 22 cm, found in South Sulawesi.

Museum Pusat collection no. 797. MP.

Reference

A similarly decorated piece illustrated in color in the Sotheby Park Bernet Inc. May 1978, New York, catalog is called Ko-Imari in Kutani enamels. Japanese now call this ware early Imari, based on the excavations in 1965 at the Arita kilns where similar pieces were found. See page 40 of Ko-Imari published by Asahi Shinbun, Tokyo 1974, based on the excavations (1965-1970) of Tengudani kiln in Arita.



27. DISH

Arita enamel ware, 17th century.
Semi-porcelain with enamel decoration in aubergine, green, black and beige on a yellow ground. Two large flowers and a flower bud in a scroll on a rosette pattern covers the whole plate. At the back a cloud pattern on a degraded turquoise coloured background, a glazed base with Fuku mark.
Diameter 37 cm.
Found in Banyuwangi, East Java.
Museum Pusat collection No. 800 MP.

Reference

Such wares were formerly called Old Kutani, but recent excavations since 1965 have unearthed many examples of this ware at the Arita kilns. Therefore in Japan similar dishes are called Arita enamel ware from the 17th century. See Orsoy de Flines, Guide to the Ceramic collection Museum Pusat Jakarta, 1972, page 56.
See S. Yamashita, Shoki Ko-Imari (Early Imari) Tokyo 1975.



28. KENDI

Arita ware, 17th/18th century.
Porcelain decorated with enamels in dark blue, turquoise, red and yellow. The body shows two panels with a man walking in a landscape. The base is fully glazed with an unglazed rounded footrim. The inside is glazed and the spout repaired.
Height 22cm.
Found in Banten, West Java.
Museum Pusat collection no. 4065 MP.

Reference

The panel decoration shows an 18th century fashion.
See Ko-Imari published by Asahi Shinbun, Tokyo 1974, p 80.

NOTES ON THE TRADITION OF POTTERY MAKING IN THE REGION OF KASONGAN, REGENCY OF BANTUL, YOGYAKARTA

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Introduction

Kasongan is situated about 5 kms to the South of Yogyakarta. Administratively this region belongs to the subdistrict of Kasihan, regency of Bantul, Yogyakarta. The village Kasongan is generally known for its pottery-making as well as other villages included in that subdistrict, covering Kasongan, Tirto, Sentanan and Kajen. These villages are situated not far from the Bedog river. Sand, which is one of the basic materials used in making pottery is taken from the banks of this river.

In this region, pottery-making has been a common profession for many generations even up to the present day. It has long provided a livelihood for many of the region's inhabitants. In general, pottery-making is done by women, with the exception of certain pottery wares such as coin boxes for saving money (*celengan*). In general, the men only help by gathering the clay and the materials for burning. They also help to bake the pottery and afterwards sell the finished products.

In Indonesia, pottery-making is not only done in this region, but also in other areas such as Tuban, Bayat (Klaten) and Soppeng, Southern Sulawesi (Soejono, 1977).

The Materials and Methods of Pottery Making

Clay is used as the basic material in pottery-making, the inhabitants calling it '*tanah lincat*'. This material is taken from the rice fields, which do not have stony soil. In general, the inhabitants of the villages do not have their own rice fields, so in order to get clay, the pottery makers have to lease the rice fields collectively for 6 months to one year. Besides clay, sand is also used as a basic material. Before mixing the clay and sand, both materials have to be sifted first. The purpose of sifting is to free the clay from gravel and roots, and to make the sand become more refined. After the clay has been cleaned, water is then poured over it to make it slushy. Afterwards it is mixed with the sand.

Mixing is best accomplished by trampling the clay with the feet. After the clay and sand become a sort of batter, the mixing process is complete and the batter is ready for use.

In the Kasongan region, the various tools used in making pottery consist of:

- The potter's wheel (*roda putar/perbot*).
This implement is made from wood, consisting of two pieces, viz. the upper and lower parts. The upper part is the larger of the two. They are joined together by an iron axle. The iron axle enables the potter's wheel to rotate.
- In addition to the potter's wheel one uses the paddle-anvil (*tatap and watu*). *Tatap* is made from wood and has a rectangular shape, the bottom part is contoured in order to fit in the hand. *Watu* is made from andesite and has a round shape. Both implements have the same function, viz. to flatten the body of the pottery from the opposite direction. *Tatap* is used to flatten the pottery's body from the outside and *watu* from the inside. They are always used in pairs.
- Besides the tools mentioned earlier, other implements are also used to flatten certain parts which can not be flattened by the *tatap* and *watu*. The inhabitants of the villages call these implements *kerik*, *secang*, *kisi* and *dalim*.

The Process of Pottery Making

As has been already pointed out, pottery in the Kasongan region is made by using the *perbot*. The process of pottery making goes as follows:

First, the mixed clay is fashioned into a round shape. It is then placed in the middle of the *perbot* (the potter's wheel). After the clay is placed on the *perbot*, the wheel is rotated by pedalling the foot lever, whereas the fingers, especially the left thumb, press the middle section of the clay creating the form of the pottery object to be made.

Once the body shaping has reached the desired height, the rim is then formed. While forming the rim, the potter's wheel continues to be rotated while applying the *dalim* which is a piece of cloth used for smoothing. Since the process is not yet complete, we might call the process mentioned above as the first phase. From this first phase the pottery is then exposed to the sun for a while, while the potter is careful not to let it become too dry. After exposure to the sun, the pottery is once again placed on the potter's wheel. The wheel is again rotated and the unfinished parts are flattened once more by using the paddle and stone (*tatap* and *batu*). During this step of the process the bottom section of the pottery is formed, because in the first phase the bottom part was still flat. Afterwards the pottery is once again exposed to the sun and at the same time the base ring is added. The unfinished parts are then flattened by using the *kerik*.

The pottery is for a final time exposed to the sun until it is completely dry. Then the pottery is baked according to the following process. Before explaining about the pottery's baking, first we will explain the process of making certain pottery wares, i.e. *mantenan* and *celengan*. The general forms of the *celengan* are known as follows: elephant, horse, goose, fowl etc. For the making of these special pottery ware *tatap* and *watu* are not used, but the *perbot* is still used as the base for placing the pottery wares. These special pottery wares are done by men.

The process of the *celengan*-making is as follows: for example how to make an elephant *celengan* — first, a lump of clay is twined and placed in the *perbot* to create the legs. Then the bowel is formed and joined with the legs. Afterwards these parts are joined with the body. Then the piece is aired until it becomes dry. Afterwards the head is formed and joined with the other parts. Then the small items such as eyes, ears, and tail are formed.

The Baking Process

In Kasongan — as in another regions too — various tools are used for baking the pottery, i.e. *jantur*, *garon*, and *congkok*. *Jantur* is an implement with a pot-like shape, made from clay. It is used as the base of the baked pottery. *Garon* is an implement made from bamboo and has a fork-like shape. It is used for gathering the baking material. *Congkok*, is also made from bamboo and which has a stick-like shape is used for keeping the flame to spread regularly.

In the baking process the *jantur* are put in a row forming a rectangular shape. Above this rectangular formation the potteries are placed upside down. The big pottery wares are placed in the lower and the small ones in the upper part.

Afterwards the rectangular piece is filled with withered leaves for burning material. After the flame flares up, the whole formation is covered with the leaves and other materials. It is difficult to estimate the temperature. According to Beals and Hoijer the baking is best accomplished on 400° Celcius (Beals and Hoijer, 1959). Gordon Childe stated that it was best accomplished if the clay was baked to 400° Celcius, because on that temperature the chemical composition will change. Generally pottery baking is done in the open air, without using a permanent kiln (*tungku/tobong*). Maybe this has been done for many generations.

The Pottery's Types and Function

In the Kasongan region, the inhabitants produce small and medium pottery wares, viz. *kuali*, *kendil*, *pengaron*, *layah*, *cuwo*, *mantenan* and

celengan. If the inhabitants need big pottery wares, e.i. *tempayan* (urn), *padasan*, they must buy from another village which produces big pottery wares.

The fact mentioned above shows that in pottery making there is a specialization of pottery wares production. In the Kasongan region, viz. the village Sentono is only producing *mantenan* and *celengan*.

The pottery wares produced in this region, can be divided into groups as follows:

- Round-bottomed pottery wares, viz. *kuali*, *kendil*.
- Flat-bottomed pottery wares, viz. *pengaron*. Pengaron has also a flaring rim.
- Foot ring pottery wares, viz. *layah*, *cuwo*.

The Function of The Pottery

The ability of pottery making appeared in the agricultural period. This shows a development of civilization. Development is followed generally by an increase in requirement, i.e. requirement of kitchen utensils etc. The people then produced several pottery wares, i.e. *cawan* (*layah*), *periuk/kuali* and *tempayan/gentong* (Jacqueta Hawkes, 1965).

The tradition of using pottery wares is still continued even up to the present time, especially in the villages. Pottery wares for daily use are *kuali*, used for cooking the vegetables, *layah* and *cuwo* used for plates and dishes and *pengaron* used for water container.

Besides the functions mentioned above, pottery wares can also be used for ritual ceremonies. This can be proved by evidences unearthed from several places, i.e. Gilimanuk and Melolo. It proves that pottery wares on those places functioned as funeral gifts and also as a place of burial itself.

The religious magic function is still continuing up till now i.e.:

- when a baby is born, *kendil/periuk* or *layah* is used for placing the placenta in.
- the marriage and the circumcision among the Javanese are always followed by ceremonies and completed with offerings. In these offerings are found small pottery wares used as rice or egg containers.

From the illustration above it can be assumed that pottery still holds an important position, either for daily use or as ceremonial implements.

Conclusions

The tradition of pottery-making in the Kasongan region can be considered as one of the traditions from the agricultural period (neolithic), which is still continued up to the present time.

According to the present data, it is clear that the tradition of pottery making exists in several regions in Indonesia, e.i. Java, Sulawesi and Irian.

Some facts that can support the theory that pottery making in this region is a tradition which belonged already to the agricultural period are as follows:

- the simple way of making the pottery, e.i. by using *tatap* and *watu* combined with the *perbot*.
- Women held an important role in pottery making. It shows the existence of distribution of labour among the people in the period mentioned above.
- Pottery is still used up till now, either for daily use or as ceremonial implements.

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NOTES ON POTTERY MAKING AT BERRU, CABBENGE (SOUTH SULAWESI)

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Location

A villager's house at Calio, which is located in the eastern compound Berru, Cabbenge.

Time

The survey was done in June 1970.

Clay Source

Clay (*tana lita*) and sand (as temper) are collected from a nearby villa called Samaoling. The colour of clay is yellow-brown.

Preparation of the paste

In systematic order:

Drying of clay and sand.

Wetting of clay and sifting (*ritanda*) of sand.

Mixing (*rilama*) of clay and sand with addition of water to acquire plasticity of paste.

Forming small balls or lumps of paste.

Pounding (*rinampuk*) of lumps of paste.

Shaping of pots

Shaping of paste into cylinders.

Shaping of cylinders into preshaped pots/vessels; *massalu*: shaping of the rim.

Final shaping of pots/vessels through the paddle-anvil technique and through the use of a "pseudo wheel" which consists of a broken upper part of a pot.

Local terms for the paddle is *pappepe*, for the anvil is *anak batu*. There are three types of *pappepe*:

1. *pappepe pappaweke* for enlarging the body of the pot.
2. *pappepe pappaweke* for smoothing the body surface.
3. *pappepe pappanyelu* for polishing the body surface.

Shapes and technique of decoration

A. Main shapes of pottery at Berru location:

- water container : a. *bempa* (with footstand; decorated).
b. *busu* (without footstand; concave base).

drinking water container	:	<i>panombong</i> (round bottomed; with incised decoration).
rice container	:	<i>pabareseng</i> (with footstand; decorated).
cooking pot	:	a. <i>lowa</i> (round bottomed; plain). b. <i>oring</i> (bigger size of <i>lowa</i>).
container/deep bowl	:	<i>katuang</i> (consisting of a flat bottomed type and a type with footstand; both have simple decoration).
stove	:	<i>dapo</i> (plain).

B. Technique of decoration :

Coating the pot's surface with red liquid.

Band appliqué on the shoulder of pots, either plain or with thumb-forefinger imprints/paddle corner imprints.

Nail imprints/imprints of small triangles on the upperpart of the body.

Incised patterns on the upperpart of the body including triangles, lines (curved, wavy, fishbone etc.), dashes.

Drying

Sun drying of pots after completion of shapes and decoration.

Drying by smoking pots/vessels which are placed on a low bamboo platform (to quicken the process of drying by lack of sunshine).

Firing

Firing of pots/vessels takes place in an open place close to the village compound.

Placing pots and vessels on a pile of dry wood.

Covering pots/vessels with dry leaves and wood before burning.

Separating complete pots after the firing.

Remarks

Pottery making at Beriu is still practised in a strong traditional manner. There are several groups of families involved in the production of earthenware pottery. The role of the woman is very remarkable as the technique of manufacture is commonly inherited through the line of mother to daughter. In fact it is considered that every woman must be acquainted with techniques of pottery manufacture. The husband is even not allowed to be present or to assist during the process of firing. Speaking loudly is avoided during firing as it will cause cracking or even bursting of pots/vessels in the firing place. The application of the simple,

technique of shaping pots which indicate a beginning of the wheel technique, and the preference of simple motifs of decoration is said to be inherited from the ancestors. Burnishing the surface is not known at Berru.

SOUTHEAST ASIAN PREHISTORIC POTTERY

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There are two major pottery traditions in Island Southeast Asia, the Sa-huynh-Kalanay and "Bau-Malay" (Solheim, 1959a, 1967a) and both of these started on the mainland. In this brief outline of Southeast Asian prehistoric pottery I concentrate primarily on the first of these pottery traditions and its origins and do not attempt to cover the total field.

I. Earliest known pottery, in a Hoabinhian context.

A. Hsien-je-tung, Kiangsi, South China : cord-marked pottery C14 dated 8920 ± 240 B.C. (half life 5730; Chang 1977 : 486), new C14 date in seventh millennium B.C. (Chang 1977; 513); Barnard (1977) gives a date of 8823 ± 35 B.P.

B. Spirit Cave (northwest Thailand) : cord-marked, net-marked, incised (Fig. 1a), polished, plain, resin (?) glazed, dated between 6500 and 7000 B.C. (Gorman, 1970).

II. Early northeastern Thailand pottery 4th millennium B.C.

A. Ban Chiang : black pottery incised and impressed angular (Fig. 1b) and curvilinear (Fig.1c) scroll and incised triangles (Fig.1d), cord-marking common, red slipping present, ring feet (occasionally perforated), associated with socketed bronze artifacts (Bill, 1975; Brown, 1977; Charoenwongsa, 1973; Gorman and Charoenwongsa, 1976; 18/2–4; Harrison, 1979; and You-di, 1975).

B. Non Nok Tha : incised and impressed angular (Fig.1e) and curvilinear (Fig.1f) scroll and incised and impressed triangles (Fig.1g), cord-marking and red slipping common, some with ring feet (rarely perforated) associated with bronze (Bayard, 1970, 1977; Solheim, 1967b–c, 1970a–b).

III. Third through first millennia B.C. mainland pottery.

A. Northeastern Thailand

1. Banchiang

a. 3rd millennium : incised and impressed curvilinear scroll (Fig2a), cord-marking common, associated with socketed bronze artifacts (Gorman and Charoenwongsa, 1976 : 21/4).

b. 2nd millennium : incised and painted curvilinear scroll and triangles (Fig.2b), cord-marking common, associated with

socketed bronze and iron artifacts (Gorman and Charoenwongsa, 1976 : 21/5).

- c. 1st millennium : freehand painted curvilinear spirals and scrolls in great variation, some jars with ring feet, associated with bronze and iron socketed artifacts (Bill, 1975; Brown, 1977; Charoenwongsa, 1973; Esterik, 1973; Griffin, 1973; Krairiksh, 1973; You-di, 1975).

2. Non Nok Tha

- a. 3rd millennium : freehand painted curvilinear scroll and triangles (Fig.2c) on vessels with perforated ring foot, cord-marking and red-slipping common, associated with socketed bronze artifacts.
- b. 2nd millennium : no decorated pottery other than by variation in cord-marking and red-slipping, ring feet without perforation common, socketed bronze artifacts present.
- c. 1st millennium same as 2nd but with changing forms (a-c see Bayard, 1970, 1977 and Solheim, 1967 b-c, 1970 a-b).

B. Cambodia : Laang Spean (Mourer, 1977, Cecile and Roland Mourer, 1970, 1971), Mlu Prei (Lewy, 1943), Samrong Sen (Mansuy, 1902); latter two with incised and impressed curvilinear and angular (meander) scrolls (Fig.2d-f), and hachured triangles (Fig.2g), associated with bronze.

C. Viet Nam

1. South : Dau-Giay (Fontaine, 1970, 1971; Saurin 1966), Phu Hoa (Fontaine, 1972), Phu-Cu (Janse, 1959), Sa-huynh (Janse, 1959; Malleret, 1959; Solheim, 1959b); incised and impressed curvilinear scrolls and meanders and hachured triangles (Fig.2a-g), impressed circles (Fig.3h), and earrings (Fig.3i-k), associated with bronze.
2. North : period of the Hung Kings (from about 2500 B.C.) phases-Phung-Nguyen (early bronze), Dong-dau (middle bronze), and Go Mun (late bronze) to Dongson (geometric pottery, with former pottery designs now on bronzes) (Davidson 1975; Long 1975); incised and impressed curvilinear scrolls, meander, and hachured triangles (Fig.4a-g), impressed circles (Fig.4h), and earrings (Fig.4i) (see also Solheim 1979).

D. South China : Hong Kong-Tung Kwu, Chung Hom Wan (Bard, 1975; Maglioni, 1975; Meacham, 1973; 1975, 1978); incised curvilinear scrolls (Fig.5a) and hooks (Fig.5b), impressed circles (Fig.5c), red slipping, painting, ring feet with perforations,

no early bronze (?). Carved paddle-impressed, geometric pottery beginning 3rd millennium B.C. (see Solheim, 1959a, 1967a).

E. Taiwan—from southern and eastern China : Tapenkeng, Feng-pi-t'ou (Chang, 1969, 1977 : 168–169); first phase 300 ± B.C. incised and impressed circles (Fig.5d) and cord-marking; second phase 2500–2000 B.C. red ware, cord-marking; third phase 2000–500 B.C. incised, impressed and painted circles (Fig.5e), hachured triangles (Fig.5f), and hooks (Fig.5g).

F. Eastern Thailand and West Malaysia :

1. Thailand : Ban Kao, Sai Yok (Heekeren and Knuth, 1967; Srensen and Hotting, 1967); little surface decoration but some insicing including hachured triangles (Fig.6a) and cord-marking, with tripod bowls and ring feet common. On small island near east coast of peninsular Thailand is typical Sa-huynh—Kalanay pottery with incised, impressed and painted curvilinear scroll and meander (Fig.6b–c), bowls and jars with ring feet (Solheim 1964a), no metal (?).
2. West Malaysia : Gua Kechil (Dunn, 1964), Gua Cha (Sieveking, 1954; Peacock, 1959; Wall, 1962); incised and impressed curvilinear scroll (Fig.6d), cord-marking, with tripod bowls and ring feet common at Gua Cha, no metal (?).

IV. Fourth to first millennia B.C. and first millennium A.D. pottery of Island Southeast Asia.

A. Earliest pottery, ca. 3000 – 1000 ± B.C.

1. Southern Philippines, eastern Indonesia : Sanga-Sanga (Spoehr, 1973), El Nido (Fox, 1970), Batungan Caves (Solheim, 1968) and probably northern Philippines in northeastern Luzon (Peterson, 1974); plain, red slipping, cord-marking, impressed circles and lines (Fig.7a–d), ring feet common, associated with shell tools and ornaments in the south.
2. Micronesia : Marianas (Spoehr, 1957); plain, red slipping, impressed circles and lines (Fig. 7e–f).

B. Sa—huynh—Kalanay pottery beginning ca. 2000 B.C. and developing into 1st millennium A.D. (see Solheim, 1959b–c, 1967a and d, 1976).

1. Philippines : Tabon Caves (Fox, 1970), Visayan Island (Solheim, 1964b, 1959d, 1967d, 1979), Mindanao (Spoehr, 1973; Solheim et al n.d.); incised and impressed and painted curvilinear scrolls, meanders, circles, hooks, cord-marking, red-slipping, perforated ring feet, earrings, sometimes associated

- with bronze after ca. 700 B.C.; Tabon (Fig.8a-c), Kalanay Cave (Fig.8f-h), Tres Teyes (Fig.8i-k), and Asian Cave (Fig.8l).
2. East Malaysia : Sabah (Harrisson and Harrisson, 1971), and Sarawak (Solheim, Harrisson, and Wall, 1961); incised, impressed and painted curvilinear scroll, meander, circles, cord-marking, red slipping, perforated ring feet, ear rings, sometimes associated with bronze; Tapadong (Fig.9a), Niah Cave (Fig.9b), Gua Sirih (Fig.9c).
 3. Eastern Indonesia : Sulawesi (Bellwood, 1976; Callenfels, 1951; Glover, 1975; 1978; Heekeren, 1958; Mulvaney and Soejono, 1970a-b), Timor (Glover, 1971), and Irian Jaya (Roder, 1959); incised and impressed curvilinear scroll, meander, hachured, triangles, circles, red slipping, perforated ring feet, sometimes associated with bronze; Sulawesi-Kalumpang (Fig. 9d-g), Batu Edjaja (Fig. 9h), and Minanga Sipakka. (Fig. 9i); Irian Jaya-Arguni (Fig. 9j), Sungala Bay (Fig. 9k-l), and east of Kaimana (Fig. 9m).
 4. Melanesia : Lapita pottery on many islands (Golson, 1974); incised and impressed curvilinear scroll, meander, hachured triangles, circles, no metal; Watom (Fig.10a), Tonga (Fig. 10b), and Good-enough (Fig.10c-d).

I do not attempt to include Southeast Asian earthenware after about A.D. 700 when the distinctive Sa-huynh-Kalanay pottery is replaced by Chinese and/or later Southeast Asian stoneware and porcelain. The spread of the "Bau-Malay" pottery (Solheim, 1964b, 1965, 1967a; Solheim and Green, 1965) from South China to Formosa started in about 700 B.C but to the rest of Island Southeast Asia it came primarily after A.D. 700 where it evolved considerably, taking in elements of the Sa-huynh-Kalanay pottery, and becoming more varied.

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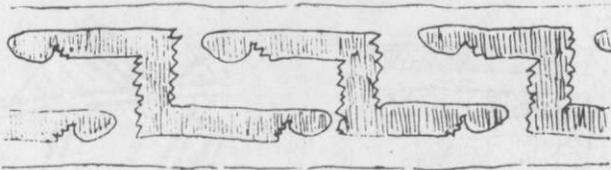
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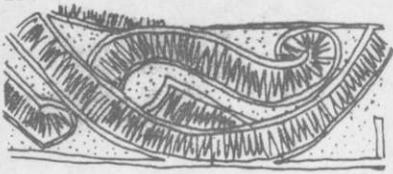
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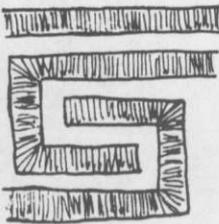
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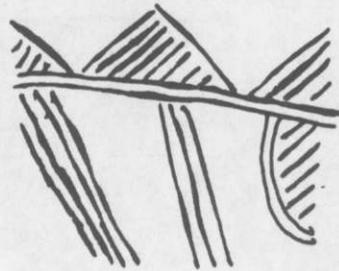
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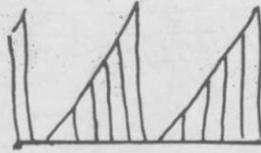
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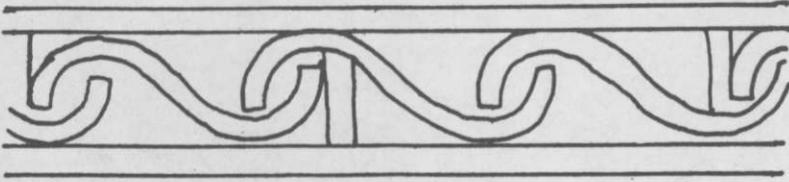
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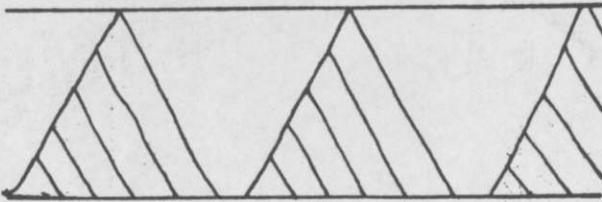
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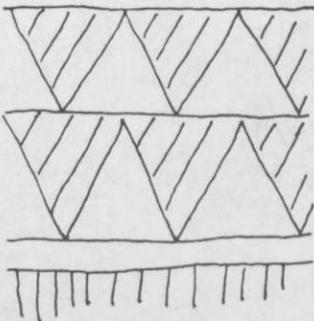
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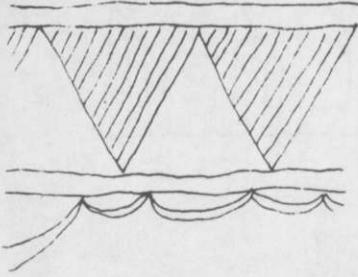
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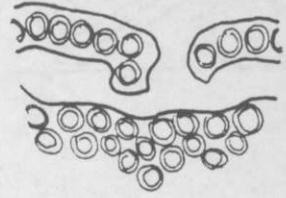
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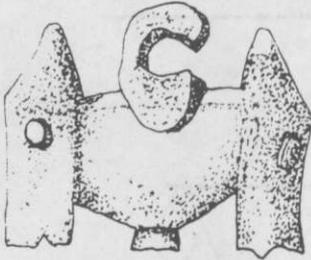
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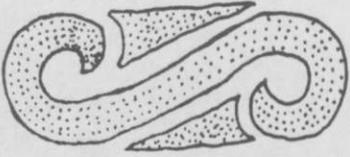
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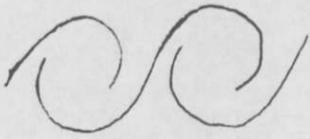
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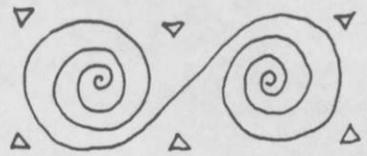
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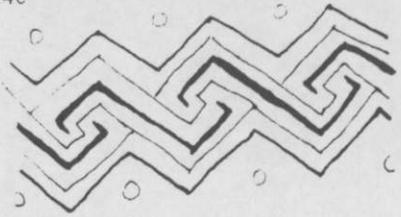
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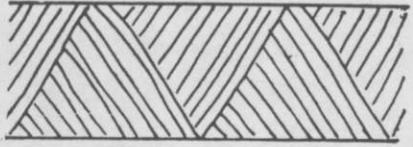
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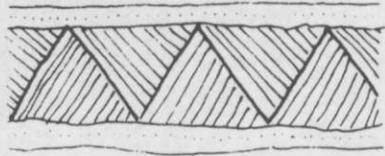
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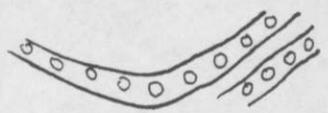
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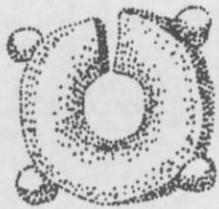
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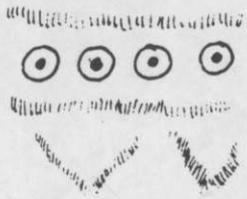
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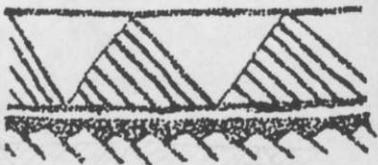
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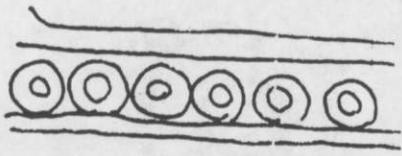
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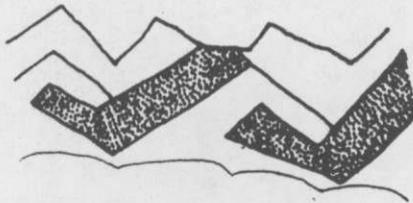
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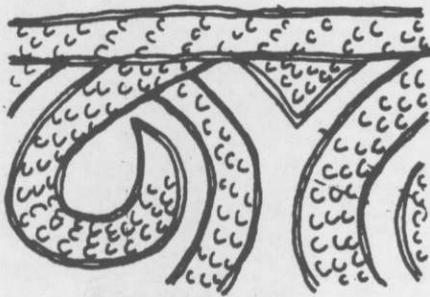
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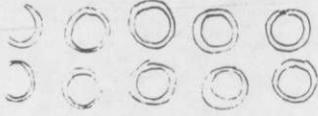
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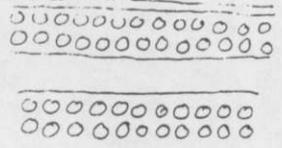
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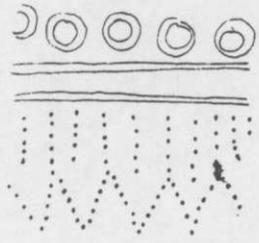
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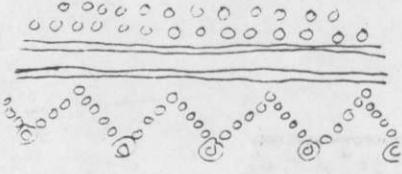
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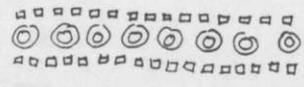
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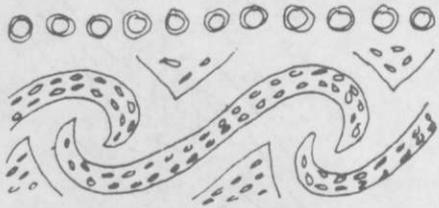
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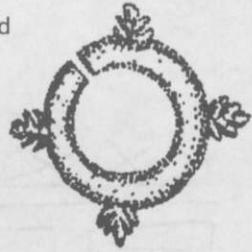
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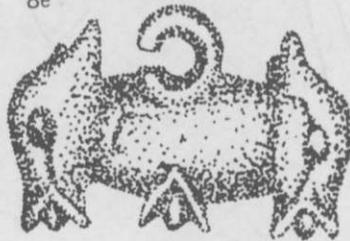
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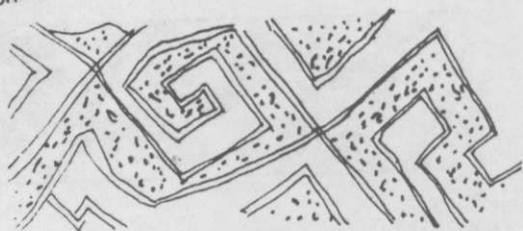
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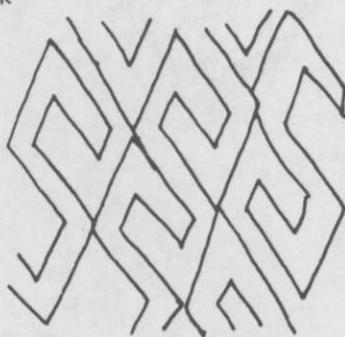
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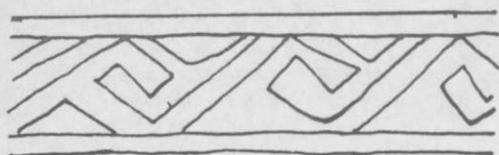
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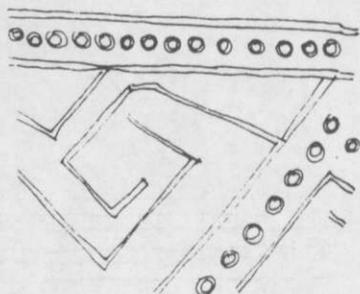
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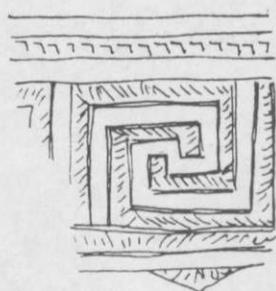
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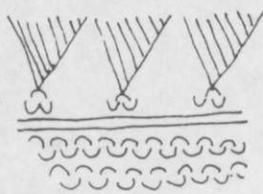
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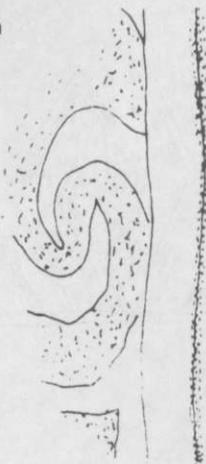
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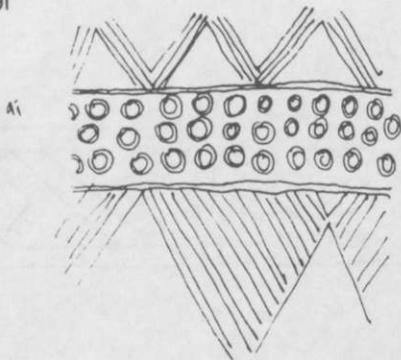
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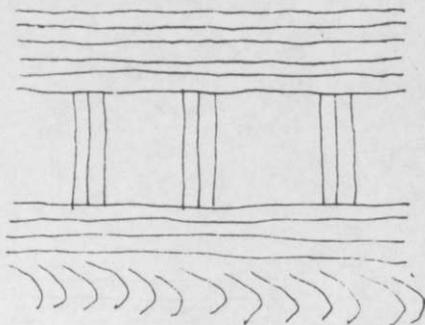
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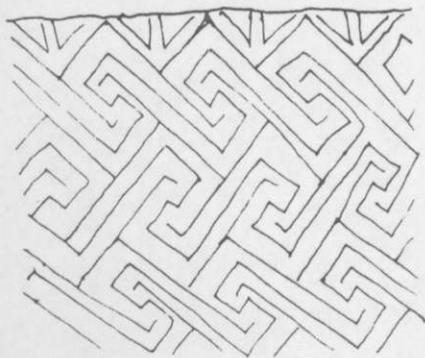
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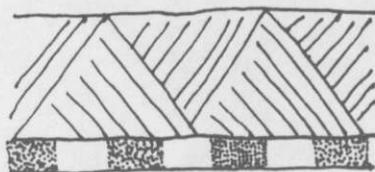
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EVIDENCES OF CULTURAL PATTERNING AS SEEN THROUGH POTTERY: THE PHILIPPINE SITUATION *

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Introduction

Philippine archaeological researches are undergoing two major shifts in orientation from the traditional approach of mere recording of artifacts. These changes are seen in the incorporation of archaeology in palaeo-anthropological studies and a shift in focus from the artifact to include ecology, i.e., the environment as part of the ancient setting. In other words, archaeological studies are no longer confined to just a giving of description of recovered artifacts but rather are increasingly utilizing sophisticated means of analysis which includes a reconstruction of ancient lifeways of a people, specifically their subsistence strategies and their socio-religious life insofar as the latter is expressed in the rituals connected with burials and in the type and quality of funerary goods that accompany these burials.

The present paper attempts to show examples of cultural patterning in archaeological context utilizing data from excavations with particular emphasis on an important category of artifact pottery. Data have primarily been derived from excavations and subsequent comparative studies by this writer of two Iron-Age sites in the Philippines.

These sites are the early Iron Age jar-burial culture of Magsuhot in the municipality of Bacong, Negros Oriental¹ and the lakeside Iron age settlements of Pila, Laguna, island of Luzon².

The Magsuhot Site

A jar-burial site that was excavated by this writer in the island of Negros in 1974–75 is located in the barrio of Magsuhot, approximately 8 kilometers in the upland interior from the coastal town of Bacong, the first municipality south of Dumaguete City, the capital of the province of Negros Oriental. This province is characterized by low, rugged and serrated chain of mountains which in most parts are close to the shoreline. The location of this prehistoric jar-burial settlement may be seen against this topographical setting. The dating is derived from analogies of similar sites already investigated, ca. 400 B.C. – 200 A.D., or earlier.

* Data from this paper may not be quoted.

Pottery as Determinant of Settlement Location of the Magsuhot Culture

The establishment of a particular type of settlement generally depends upon a number of factors, the most important being closeness to sources of food, accessibility to good drinking water and, to a certain degree, considerations of safety of location. Settlement sites normally reflect the adaptation of a society and its technology to its environment. In the case of Magsuhot we rest on the assumption of causative priority.

Located in today's relatively barren environment, one is struck by the relative richness of the prehistoric culture that had at one time flourished there in marked contrast to the poor conditions that presently prevail. Only about twenty families now inhabit the region. The determinant of settlement choice by this prehistoric jar-burial practicing people obviously had lain elsewhere than the important consideration of, say, a productive land base. The possibility of exploitation through some form of agriculture had, however, not been ruled out for while today the area is virtually denuded of even a secondary forest, in the past a different situation could have been obtained. In any case, while the relative productivity of the land in the past is not readily apparent, what is apparent is that this early Iron Age community was able to live out their annual subsistence cycle within their own settlement site.

The answer to the many questions raised with regards to the problem of why the site of Magsuhot was chosen for settlement was sought in the artifacts, for it is possible to draw information from the material culture that have been preserved. Settlements have been known to spring up in relative wastelands where rare and valuable resources are discovered. In Magsuhot, one of the important resources was clay. The most striking thing about Magsuhot burials is the quantity of the pottery that accompanied these. In two particularly rich burials, the recovered grave furniture constituting almost exclusively of pottery averaged 85 pieces per burial.

Other possible valuable resources that had been considered were forest products that were becoming important in the maritime commerce in Southeast Asia prior to the 10th century, A.D. As early as the turn of the Christian era, patterns of maritime trade had been established in the Philippine Archipelago. The evidence for this comes in the form not only of trade ceramics from China, but also of luxury products for adornments, glass beads and bracelets, that are traceable to Middle Eastern origins.

The maritime trade in Southeast Asia is traced back to the Southern Chinese dynasties' needs for Western luxury goods that had been blocked off from their traditional land routes. Rather than send out for what they needed, the Chinese were apparently content to just sit and attract

shipping to their shores. The consequence of this was a proliferation of entrepôts along the main trade routes like Oc-Eo in Funan, and a few others along the isthmian routes in the Malay Peninsula. It is not the intention of this paper to go into the details of the dynamics of this maritime trade. It is sufficient to mention here that one of the important products in the Western markets that attracted the Chinese were jungle aromatics (frankincense, myrrh, camphor, etc) which were believed to have found competition in Southeast Asian substitutes.³ It is therefore suggested that this trade in forest products saw the establishment in the Philippines of settlements in upland areas which are otherwise regarded today as low in exploitative potentials.

Thus apart from the local trade in pottery, the Magsuhot jar-burial people appear to have also been engaged in indirect maritime trade with more enterprising middlemen for foreign manufactures.

In Magsuhot, the accessibility to a seemingly inexhaustible source of clay in addition to other enterprises that were indirectly connected with maritime commerce, may be said to determine the settlement choice offsetting as it were, the absence of inherently more ideal conditions in the area.

Once the complex surrounding pottery manufacture is understood, and other commercial activities defined, it is not too difficult to see how this jar-burial culture developed progressively in a way that could be compared to groups whose stability depended solely on agricultural economies.

Pottery has been used as a standard basis of exchange for commodities not readily available in the community. The virtual lack of evidence for, say, iron working in the form of slag and other residue of smelting activities, and the negative evidence for weaving (eg. spindle whorls), point to iron products and woven fabrics as items that were bartered for the locally manufactured earthen-ware. Luxury items in the form of exotic beads and bracelets made from glass were traded in exchange for other categories of staples within their reach of exploitation (viz: forest aromatics). The exchange of foodstuffs is seldom in evidence and it is through the discovery of extraneous raw materials or artifacts, such as iron implements and ornaments of glass, that the existence of external trade is established.

In his detailed discussion on the economics of Buhid pottery, Conklin had demonstrated the negotiability of pottery among an ethnic minority group called Mangyan on the island of Mindoro.⁴ For instance, the smallest variety of cooking pot, takes a value equivalent to one string of beads. The value of any other kind of pot is thereafter determined by using this standard as basis.

In Magsuhot, as far as determinants of settlement was concerned, it can be said that accessibility to a rich source of clay and consequent trade in pottery as well as external commercial contacts in the form of exchange of certain staple products for manufactured foreign goods, may have provided the wherewithals for subsistence for this early Iron Age people.

Insofar as local pottery trade is concerned, one specialist in South-east Asian pottery states: "Pottery may be the only item through which there is a constant cyclical source of money or goods from outside a community."⁵ Today pottery manufacture is a home industry from which a sizable number of people near Dumaguete City eke out their livelihood. The best clay material for pottery in the whole province is found in the area that is now Dumaguete City. Magsuhot is located just a few kilometers south of this source of clay in addition to other sources in the immediate vicinity. The ready availability of a good source of clay for the craftsmen has maintained the pottery industry in Dumaguete City just as this writer has hypothesized for the Magsuhot community in the prehistoric past.

Craft Specialization in the Pottery Industry of Magsuhot

Pottery making is usually a hereditary craft which is passed down through either the mother's or the father's side. In the case of the Iron Age Culture of Magsuhot, pottery craftsmanship appears to have been handed down generationally from both lines. Women have been traditionally associated with pottery manufacture but no rigid rule exists which prevents men from participating in a predominantly female activity. Solheim has shown that among the Ibanag of Isabela in northeastern Luzon, men involved themselves in pottery manufacture by taking on the harder task of making the heavier stoves.⁶ The Magsuhot situation could have started as a cooperative endeavor between the women and their menfolk, especially in the manufacture of the heavy burial jars and pottery coffins. It appears that two factors operated towards bringing about male involvement in the pottery industry leading, as it were, to an actual craft specialization. These are the factors of size and the sheer weight. One burial jar alone had weighed more than 50 kilos. In primary burial in jars, size was not the only factor considered by the Magsuhot potters but thickness as well.

This theory of craft specialization finds support in certain elements of design and mode of manufacture:

- a) the heavy burial jars and pottery coffins together with the ritual vessels and figurines that were manufactured under special conditions are attributed to the male potter, while

- b) utilitarian forms with simple incised designs, such as the cooking pot forms and their derivatives, bowls with stands, angle pots, perforated pots, etc., that appear to be manufactured under different conditions than the above category of vessels, are believed to be made by the female potter.

Analysis has shown (the details of which will not be discussed here) that differential distribution of the Magsuhot pottery complex outside its centre is partly the result of trade and partly a reflection of change in the design vocabulary of this pottery complex resulting from the occasional marriage of women (as potters of the utilitarian forms) outside the group. As a pottery complex, the pottery assemblage of Magsuhot is identified with the Bagupantao Pottery Complex after Solheim.⁷

The burial jars and pottery coffins are invariably decorated with lenticular cut-out designs on applied flanges, usually located under the lip rims and covers. This design dominates the total pottery assemblage although it is not commonly met within the more utilitarian group of vessels that is believed to be the products of woman potters that take the forms of simple cooking pots, angle pots, footed dishes, and so on. The jars, coffins, and certain categories of ceremonial vessels including the figurines that were the exclusive manufactures of the menfolk appear to have been fired under conditions different from that which were obtained in the rest of the pottery assemblage.

The very exclusiveness in the manufacture of ritual vessels by the male members of the community appears to have some religious significance. The shapes of some of the pottery that fall under the category of ceremonial vessels indicate non-utilitarian function. Examples are the double-rim or open-ended pots which are especially reminiscent of fertility symbols as are the elongated gourd-like forms. In one particular example of the double-rim type the truncated rim produced an effect resembling the male organ. This phallic/fertility concept is exemplified in the discovery of a ritual vessel which shows two female figures sitting astride it, their limbs entwined. The interesting point is that one of the female figures is unmistakably pregnant. This is one of two instances of pregnant figures recovered from the burials. The other bigger figurine, measuring about a foot high, has its hands supporting its distended stomach.

Reconstruction of some Socio-Religious Patterning in the Magsuhot

It has been stated that the clearest evidence for status differentiation in a society comes from graves. Burials have also been a source of information on certain aspects of the socio-religious lives of people. In Magsuhot three sources of evidence for social stratification may be mentioned:

- a) the existence of rich complex burials vis-a-vis simple burials,
- b) the presence of figurines and certain pottery objects identified as status or power symbols, and
- c) a carved megalith weighing approximately 500 kilos that this writer interprets as a ceremonial seat.

Two types of burials were distinguished in Magsuhot on the basis of disposition: a) the complex burial, and b) the simple burial. Exemplified by two examples, one of the complex burials excavated in Magsuhot was a multiple burial of three jars in one grave pit measuring 2 x 1 meters and, the other, a combined burial of a very big burial jar measuring about 80 cm in diameter and a pottery coffin in a grave of similar proportions. The evidence obtained disclosed the phenomenal association of funerary pottery goods numbering at least 70 and 100 pieces to each grave. These figures are remarkable by any early Iron Age standard; no other Iron Age jar burial culture has yet been discovered in the Philippines that approximates the richness and sophistication of the culture that existed in Magsuhot in the prehistoric past.

These complex burials were, moreover, disposed in what this writer calls "two-level graves." In other words, additional goods were laid after the initial cover-up of the main burial. Simple burials are found in only one level and accompanied with relatively few (averaging 30 pieces) pottery goods.

Due to the extensive erosion of the topsoil — the cemeteries being located on top and along hillsides — the topmost layer of funerary pottery in complex burials is usually found just a few centimeters from the surface. In one of the complex burials found the main burial located 77 cm. below the surface was connected to the top assemblage by a carefully placed series of nested pots in mouth-bottom arrangement that started directly from the main burial jar.

The motif seen on burial jars and pottery coffins is a stylized representation of a cock's head, usually in sets of two, on top of their covers. The significance of this motif was not immediately apparent until the recovery of one complex burial where the decoration of bird heads on the burial jar was graphically represented.

A staff-like pottery object with the stylized representation of a cock's head on one end has been identified, on the basis of analogy to Western-type mace heads as some symbol of prestige or power. As such this must have been associated with an important personage. The attribution of status by itself is an indication of considerable influence and power on the individual to whom this is identified.

In an analysis of the tripartite view of the world by certain indigenous groups in Asia, it was shown that the underworld is represented by the fish (alternately lizard, snake, or crocodile), the present world by the beast of sacrifice (eg. cow, buffalo, etc.), and the skyworld by the bird (alternately the rainbow).⁸ The meaning of the bird motif on the burial and pottery coffins should perhaps be interpreted in this context. The idea must have carried with it the belief that entry into the skyworld would be greatly facilitated by its observance.

In shamanism and related phenomena, the cosmic axis takes many forms: rainbow (alternating with the boat among riverine and maritime groups), tree, ladder, mountain, etc. From as far west as India to China, the "heavenly ladder" usually has a cock on the top ring. Thus, in parts of China, the shaman candidate climbs knife ladders on top of which the celestial cock roosts. The heavenly ladder of the Indian Savara tribe on top of which a cock is also perched, is believed to have identical significance.⁹

The existence of a stratified society within the Magsuhot jar-burial culture is inferred from the presence of certain pottery objects, the figurines, and differential treatment of burials. An important addition is the megalith which has tentatively been identified as a ceremonial seat. On one end of this stone are carvings of two heads and the beginnings of a third. Symbols or ancient forms of writing are incised into this stone, just above the carved heads.

Some Logistics Involved in a Jar Burial Ceremony in Magsuhot

It is of interest to include a discussion on the probable logistics involved in a burial ceremony in the context of the early Iron Age community of Magsuhot.

Given the weight of one jar alone, and the quantity of associated grave goods that were interred with the deceased, the burial entourage must have involved the participation of a good number of related families in conducting just one burial ceremony. An experiment was made by this writer using one medium-sized burial jar, approximately just 1/3 the size and weight of the 52-kilo jar from one of the complex burials. From a point in the center of the jar-burial site, to only just about a kilometer down to base camp, it had taken an average farmer at least three stops in his negotiation of that small jar downhill! Assuming that the habitation areas were located on the surrounding valleys, burial entourages would be climbing up the hills to get to the burial site, not the other way around.

Ingenious ways were probably employed in conducting an elaborate burial like the complex burial of, say, three jars and accompanying

bones. That the skull was no longer articulated to the rest of the body was shown by its unnatural position with the top of the skull oriented towards the pelvic region rather than the other way around as would have been the case if the body had been merely doubled up. Directly underneath the limb bones and enmeshed in a matting of rotted rib bones were the thoracic and cervical vertebrae. From this evidence it appears that the torso was laid first near the bottom of the jar, the flexed lower limbs on top of this, and the head deposited last on top of the thigh bones. It has not been possible to reconstruct the exact placement of the children's remains. When found, only the outline of the skull of the older child could be seen. Its mandible, still more or less intact, lay beside it. Of the infant remains, only a few long and rib bones identified it in addition to the few teeth. The children's remains were located opposite the adult remains.

Hundreds of paste beads, predominantly orange in color, and some iron implements were likewise recovered from the main burial jar. Included in the heap of human bones and grave goods were fragments of animal bones. Funerary provision must have included offerings of food. Evidence of meat offerings came in the form of remains of chicken and pig. In addition to the multi-colored paste beads, a thick bevelled, orange paste bracelet was found at the bottom of the jar directly under the adult remains.¹⁰

This practice of dismemberment prior to burial in a jar finds ethnographic parallel among the Sagada of the Mountain Province of northern Luzon.¹¹

A closer examination of some of the remains of the animal offerings showed that these were ceremonially cooked over fire before being put inside the jar as some of the skeletal remains show signs of burning. These offerings of animal meat were laid at the bottom of the jar before actual interment of the bodies.

It is suggested that the pottery industry of Magsuhot was a collective effort by a good number of families in the community. The phenomenon of high quantity in pottery association that characterized many burials can be explained in part by the status of the deceased as well as in the practice of each related family of offering an allotted number of funerary gifts of pottery in each burial.

As far as means of transport is concerned, the travois or bamboo sled would already have been in existence and used in transporting entire burial assemblages. From the evidence of one pottery figurine of a young calf or caraboo that was recovered from a burial, that species of do-

grave furniture of 100 pieces of pottery, or even of a less elaborate or simple burial of only 30 associated pieces of grave pottery, taking into account the fact that one pot averages about a kilo in weight. And this does not yet include the rituals attached to the preparation of the corpse for burial, the preparation and setting up of the funerary offerings, arrangement of the entire assemblage of grave goods in the burial pit, plus ceremonies attending the exhumation of older burials for inclusion into the new one in some cases.

The Magsuhot jar burial practice was a primary mode of interment in jars with occasional inclusion of older bones of relatives. In one of the complex burials in Magsuhot that had lent itself to analysis, the primary burial of a young female adult and two children inside one jar (the biggest jar in a complex of three jars in one grave), had an inclusion of older bones and teeth belonging to at least one other individual. Other interesting features in connection with this particular burial was the deliberate breaking of a number of pots to line the grave pit and in the lining of the middle jar with powdered haematite. In order to accommodate the adult corpse inside the jar the body had first to be cut up. The following is a detailed description of the adult corpse and the other remains as these were carefully recovered from the jar:

A preliminary analysis of the contents of the burial jar disclosed a multiple primary burial of an adult female and two children. One of the children was approximately 6–9 years of age. The evidences used for age determination were the newly erupted first permanent molars and lost deciduous incisors on the mandible. The other was an infant. The limiting age of 20–25 years for the adult female was determined by the degree of union and non-union of the proximal and distal epiphyses, respectively, of the femoral bones. It is unfortunate that the portions of both maxilla and mandible that carry the second and third molars were missing so that it has not been possible to observe eruption or non-eruption of the third molar to substantiate evidence for ageing. In any case, suture closure on the skull had not yet commenced. The thigh and leg bones of the adult female were articulated in flexed position when found. The majority of the vertebrae, specially the cervical set (all six in articulation, except the atlas bone) were intact. In order to fit no less than three bodies into a jar measuring 54 cm. at its widest diameter and 79 cm. high to the top of its cover, the bodies had to be dismembered prior to placement. At the time it was excavated the adult skull lay on its right side with the maxilla pressed against the northern section of the jar (later its mandible would be recovered from the opposite wall near the children's remains). It lay directly on top of the thigh

mesticated animal had perhaps played an important role, then as now, as beast of burden and, perhaps also, as beast of sacrifice.

The Pila Site

The excavation site in the barrio of Pinagbayanan, municipality of Pila in the province of Laguna, referred to as the Pila site, was one of several archaeological sites bordering the southeastern margin of Laguna de Bay, the largest lake in the Philippines. The total area excavated by this writer in 1967–68 involved three adjacent sites in all covering an area of 6000 sq. meters. Within this relatively, small area, close to 400 burials were recovered comprising two main cultural periods. Period I is early Iron Age in date corresponding to the Magsuhot settlement. Period II, already protohistoric in date, is subdivided into three phases.¹²

Period II abounds in evidence of a more direct and intensified maritime trade contacts with China which, otherwise, was only suggested in Period I. This maritime trade contact, during Period II was not only confined to China but also showed relations with Siam and Annam, especially in the late 13th to the 15th centuries, A.D.

Determinants of Settlement Location in Pila

The Pila site was used both for habitation as well as burial over a much longer period of time than the Magsuhot settlement. The determinants of settlement choice do not appear to be too difficult to reconstruct. The Pila settlement is described as a fishing-oriented economy with an agricultural base, a classic example of an adaptation by a society to its environment. Reconstruction of the patterns of exploitation has not presented a real problem due to the strong indication of continuity of the same patterns into the present. Recovery of net sinkers and, in one instance, of a bronze fish hook, indicate intensive fishing activities, a situation presently prevailing in many shore areas, and the site's location along a stretch of irrigated agricultural land, suggested similar utilization in the past. Just as maritime trade as supplementing the economic base is suggested for Period I, this activity appears to be intensified especially in Phases 1 and 2 of Period II.

In contrast to the Magsuhot situation, there is abundant evidence of iron working. Iron slag were items of artifacts commonly encountered in Phases 1 and 2 of Period II. Similarly, the recovery of spindle whorls is interpreted as indicating the existence of the weaving industry. Among the items mentioned as staple products of the indigenous peoples of the Philippines in the maritime trade with China was native cloth material.

Local earthenware in Periods I and II do not compare in quantity those recovered from the Magsuhot burials. One of the reasons is perhaps

the fact that we are here witnessing the beginning of the deterioration of the local pottery industry in the face of stiff competition with the better-fired, better-shaped ceramics from China, especially in Period II. This is not a phenomenon unique only to Pila, however. It appears that devolution in local earthenware manufacture was a universal feature that was associated with the appearance of highly fired products from kilns in China and mainland Southeast Asia. In a subsequent discussion it will be shown how the differential treatment of local pottery vis-a-vis their imported counterparts established status differentiation in Pila society.

Evidence of Socio-Cultural Patterning in the Cremation Burial Practice of Pila

The Pila site yielded four cultural levels which were clearly delineated by a difference in associated assemblages and, in the case of the later phases, association of China trade wares bearing diagnostic decoration of potteries manufactured under the Chinese Sung, Yuan, and Ming dynasties.

The appearance of new burial tradition in Laguna heralded a new phase characterized by a religious outlook that included ritual burning of the exhumed bones before reburial in a jar. Additional evidence of multiple reburial was also present, the jars becoming progressively smaller with each reburial.

Cremation burial characterized Phase 2 of Period II. The cremation burials were of two types: 1) burial directly in a pit and, 2) burial in a jar or vessel. A further classification is based upon the presence or absence of associated grave goods. By the end of the project which lasted about one year, ninety one or roughly 25 per-cent of the total number of burials recovered from the Pila site were cremation burials. Included in these assemblages were a number of doubtful cremation burials which were invariably found in larger stoneware jars. The regularity with which these were discovered in smashed condition initially provided a very challenging problem. Their subsequent inclusion within the cremation burial complex was based upon the following factors:

- 1) the presence in a number of these seemingly deliberately broken jars of traces of charcoal and charred skeletal remains believed to be human,
- 2) the regularity in which these were found in close proximity to definite cremations, whether directly in pits or in vessels, and
- 3) the presence of grave goods, whole or broken, inside these jars which provides a striking parallel to excavated cremations in vessels which also contained grave goods.

The hypothesis that the cremation in Pila was secondary is based upon several factors foremost among which is that in primary cremation large fragments of skeletal material rarely occur.¹³ The cremation in Pila not only included recognizable parts such as long bones and large fragments of skull bones, but sometimes whole jaw bones with a few teeth still intact as well as finger and feet bones.

In this cremation burial in jars we also see a parallel practice of multiple burial (burial of more than one individual inside one jar) that had been demonstrated in the Magsuhot jar burial culture.¹⁴

Ethnography has not shown an example of secondary cremation burial practice among existing groups in the Philippines. The closest parallel has been drawn from a tribe in Borneo called the Sihoungo. In their practice of secondary cremation, such ritual is considered an absolute necessity for purposes of purification. All unatoned sins are wiped away and then "the spirit is as clean as though washed in gold."¹⁵

Another and more important evidence in support for secondary cremation was the discovery of a crematory complex which was comprised of a structure made principally from ferric oxide with three chambers none of which is large enough to contain an average-sized adult corpse. A number of smaller structures basin-shaped made from the same material also were discovered, having an average dimension of 40–50 centimeters in diameter. These smaller structures may also have been used for burning the disarticulated skeletal remains. Their discovery initially presented another problem until the recovery of a cremation burial in a brown spherical jar *in-situ* sitting on top of one of these red ochre structures.

The Problem of Multiple Reburial

Secondary burial has been defined as an "indirect kind of burial practice in which the body is to be buried at least twice though often washed three or four times."¹⁶ A number of primitive groups practicing secondary burial today regard the ancestral bones as the abode of the ancestral spirit. Consequently, special care is taken in the cleaning of the bones before reburial as the belief prevails that the fortune of the entire family is dependent to a great extent upon the manner in which the ritual is observed. And when a calamity or serious illness befalls a member or the family, usually this is attributed to the displeasure of these spirits so that the bones have to be exhumed, cleaned and subsequently reburied. The number of times that this is done would appear to be dictated by the emergency of the situation demanding it.

Referring to the phenomenon of the smashed large jars, these were almost invariably found in close proximity to cremation whether in pits

or in containers, and the inference is that what we are witnessing in Pila are parallels of the above situation in archaeological context.

Evidence of External Influence in the Cremation Burial in Pila

The cremation burial practice found in Pila had an impact so strong and compelling to the indigenous population as to spread rapidly around the lake region despite its relatively short duration. At this point it is possible to present the conditions which facilitated the introduction of this cultural trait into this part of the Philippines.

The Chinese had, for centuries, been in contact with the early Filipinos through maritime trade. In fact, it would appear that the only intensive outside contacts the early Laguna settlers had during this particular period was with the Chinese traders. Evidence points strongly to an actual settlement by these foreigners and, most likely, marrying of local women in the Laguna area.

In this connection it will be useful to introduce a category of ceramic item — the so-called "water droppers" — which were intimately linked to the problem and has constituted an additional argument for an actual foreign intervention at this time. These water droppers were tiny spouted vessels that were used to wet the ink in connection with writing or calligraphy. Outside of pure chance, there was no logical reason for these tiny vessels to be brought into the Philippines as items of trade, unless actually carried and introduced into the indigenous culture by actual settlers who came from a tradition where writing was known to a literate few. This is probably how they came to be introduced into the recipient Laguna culture, not necessarily in their original cultural context, but initially and, it would seem thereafter, as highly valued knick knacks with the now added function of establishing status symbol to their new owners. Like the cremation burial practice, nowhere but in this part of the Philippines have water droppers been recovered, and in phenomenal quantity and shapes.

What this could mean is that foreign agents — most likely the Chinese — actually established settlements in the area and introduced certain artifacts specific only to their culture, such as the water droppers that were used in calligraphy or writing. At the same time, they introduced a new religious concept resulting in the sudden and widespread appearance of an entirely new burial tradition, that of cremation. Whether introduced in toto or was the result of indigenous innovation of the same concept, are questions that will not now be possible to answer.

Stratification of Pila Society as Seen Through Pottery

It was previously mentioned that a mode of burying in two levels characterized the complex burial in Magsuhot. This practice of adding

grave goods after the partial cover up of the burial pit also finds a parallel in the Pila site of Laguna.

In the case of Pila it was the local earthenware that was placed on top, perhaps an indication of the high value the Pila people had attached to the imported ceramics which formed the main burial assemblage, in opposition to the seeming low esteem of their own local products that were separated from the rest of the assemblage. Another illustration of this apparent pottery discrimination is connected with the practice of wrapping of the dead in a shroud or matting together with some of their prized possessions. In such cases, the earthenware were found on the same level but away from the main cluster of imported ceramic pieces giving the impression that they were not bundled together with the corpse.

Again, as demonstrated in Magsuhot complex burials, the Pila burials with associations of relatively high number of pottery of better quality as exemplified by the delicately potted *ch'ing pai* pieces – in a good number of cases in shapes of animal and fruit water droppers – and celadon dishes and jarlets, are attributed to personages of higher rank in society in contrast to those with only a few, and generally of the more interior, stoneware varieties that are identified with the lower class.

Some Socio-Religious Concepts Found in Pila

Concepts that are connected with fertility is not unique to the jar burial culture of Magsuhot. The extensive recovery of net sinkers in Pila have been mentioned. These earthenware objects were recovered from the earliest to the middle phases of Period II. As an indicator of intensive fishing activities in the lake area, this mode of exploitation existed at least for two cultural levels. These pottery objects were in a number of instances realistically carved into representations of the phallus. A number of these phallic objects were recovered from the excavation floors, others in clear association with inhumation and cremation burials. A more interesting association were of a male and female symbol in a cremation burial. The female symbol takes the form of a spherical net sinker or large earthenware beat with a deep cleft along one side.

Similar sexual conceptualization encountered in the Magsuhot jar burial culture appear to be an integral part of a widespread cult that involved the worship of the phallus in connection, perhaps, with ancestor worship and/or fertility. In the case of Pila, these sinker/phallic objects were probably either worn as pendants or strung to the fishnet as regular sinkers but attached with religious significance.

A category of pottery that is not quite uncommon in the Delta region of Sarawak, Malaysian Borneo, are the phallic-topped covers.

Phallic tops were first reported by Solheim from studies he conducted on pottery from Tanjong Kubor near Santubong.¹⁷ These phallic-topped covers have been ethnographically correlated with the Badjau in Sabah who continue to make such lids today. This inclusion of the phallic lids in the discussion of phallic objects/net sinkers recovered from Pila lies in their suggested connection with a widespread sexual symbolism that appear to include also the Jaong anthropomorphic rock carvings of figures with legs outspread and arms outstretched. It is mentioned here that such a motif has also been encountered on some stone burial jars recovered from cave sites in the province of Cotabato in the island of Mindanao¹⁸ and in Sulawesi in Celebes (data obtained from a communication from W.G. Solheim II).

This preoccupation with the sex symbolism in the form of phallic objects appear to find many parallels in China where these are correlated to the *tsu* and *she* ritual places for ancestor worship. The characters for these ritual places are supposed to symbolize the sex organs. This situation is likened to the marae of the Polynesians and the *sua* or *sar* of the Melanesians.¹⁹

Summary and Conclusions

The foregoing discussions brought out the kinds of factors that were operative in determining site placement by Iron Age communities that were widely located in space and, to a certain extent, also in time. The Magsuhot jar burial culture was located far inland in a region that, evaluated at present face value, does not appear to possess the wherewithals for a substantial food resource that was necessary for existence. But a rich culture did exist there in prehistoric times and the probable stimuli for the development of a sophisticated jar burial community lay in certain choices of usable resources, in particular clay, to sustain a flourishing trade in pottery and, possibly, accessibility to mineral ores and certain forest products that were bartered for foreign manufactures within the framework of wider commercial contacts.

The Pila settlements, on the other hand, had enjoyed an inherently favourable environment, being situated along a lakeside site teeming with exploitable aquatic life and an area equally high in potentials for irrigation farming. Still, the area would have been relatively remote had it not happen to lie along the main route of traffic in foreign goods and many cultural ideas. Entry into the lake area was effected through the Pasig River that formed the main artery that connected the lake area to the South China Sea maritime trade traffic. The traffic of goods and ideas along the Pasig River route resulted in the proliferation of important trading ports, not only around the Lake area as Bay, Pila, Lumbang, and

Sta. Cruz in Laguna, but also in the area of Manila Bay as witnessed by the famous site of Sta. Ana.

Trade provided the stimulus for cultural development among the early Iron Age settlers of Magsuhot and Pila, rather than any other subsistence strategies adapted by these early communities. The wealth amassed had, in turn, enabled the groups to procure certain items of material culture from near and distant regions that were necessary for their existence.

In Magsuhot, the negative evidence for actual iron working and cloth weaving presupposed trade for these items outside the settlement in exchange for their own pottery products. Trade as the main economic base has provided an ample source of wealth for both the Magsuhot and Pila Iron Age settlements and, as demonstrated especially for Magsuhot, the growth of a rich jar burial community in a relatively remote region.

In Magsuhot two levels of economic activities appear to have been engaged in: 1) local trade in pottery and, 2) an implied wider commercial contact that brought in foreign products of which the only surviving testimonies are the ornaments of glass that originated from as far as the Middle East and the Mediterranean.

The obvious reliance on other material goods for existence presupposed some kind of craft specialization on a local or village level. Perhaps a number of communities, not necessarily related, were linked together in a trading network, enabling these communities to transcend particular limitation in their respective environments.

It had, likewise, been shown how graves provided interesting clues for social and political organization. We saw how status (which implies social stratification) can be inferred from the differential treatment of burials as well as in the manner of their disposition and the types of grave goods that are interred in the burials. Certain items of artifacts also can give information or clues on the political organization of people. The existence of a pottery staff-cum-mace head, the presence of special ritual vessels and figurines from the Magsuhot site, and the stone ceremonial seat point to a developed political organization which would be expected to follow in the wake of a growing population. It is pointed out that the Magsuhot jar burial settlement encompassed three contiguous barrios: Liptong, Malabago, and Magsuhot. The density of population that is being demonstrated from both the Magsuhot settlement and Period I and Phases 1 and 2 of Period II of Pila, was drawn from the extensive distribution of burials in these sites. The burial sites alone belonging to Period II in the three barrios of Pila, which includes Pinagbayanan (the actual excavation site) that had been overrun in the late

60's by commercial diggings, totalled a remarkable area of 18 hectares. Consequently, a form of political structure had to be in existence.

Certain items of artifacts such as the phallic pottery objects from Period II of Pila provide an idea of the extent of the influence of cultural ideas, perhaps mainly through stimulus diffusion, a by-product of the existing trade contacts.

The secondary cremation burial encountered in Phase 2, Period II of Pila, was likewise the result of intensive contacts, resulting in its actual introduction into the area of Laguna through actual migrations and not through stimulus diffusion. The change of mode of disposal of the dead from the common inhumation type of burial to that of secondary cremation denotes a probable change in outlook that affected religious concepts, especially in the areas of attitudes towards life after death.

The motif seen in the Magsuhot jar burial complex was derived from the bird which, from ethnographic analogies, represents the skyworld. Representations of the bird motif have also been seen on other forms of burial, such as in the boat-coffin burials that co-existed with jar burials over wide areas in Southeast Asia.²⁰ Because the bird is thought of as representing the skyworld, the boat coffins of the Ngadju Dayak are shaped like a hornbill. Likewise, among groups in Assam, coffins are decorated with hornbills which they call boats. Finally, the ceremonial Dongson bronze drums on the Southeast Asian mainland and parts of Indonesia carry motifs, not only of boats, but also birds and bird-shaped men.²¹

Thus it has been shown that certain factors of the environment can determine particular choices of the archaeological settlement: in Magsuhot it was source of clay for their pottery industry and in Pila, an environment rich in food resources in addition to trade in ceramics in the later phases.

The overall implication is that the particular settlement pattern chosen by early peoples can be a causal factor of social forms. Religion was seen as being expressed in certain rituals and in the types of burials encountered as well as in the quantity and types of grave goods, especially of pottery, associated with these burials and, finally, the nature of the political organization was partly inferred from the needs of a growing population that resulted from wealth amassed through trade (predominantly in pottery), as well as in certain artifacts (eg. the pottery mace head) and, in the case of Magsuhot, the megalithic structure that is interpreted as a chief's ceremonial seat.

Table 1
Chronology of Cultural Developments in Pila, Laguna

Period	Culture	Characteristics	Date	Burials
Period I	Early Iron Age	Novaliches type Pottery Complex, first identified by W.G. Solheim II (1964); limited distribution in the Laguna area; simple inhumation burial	Ca. 400 B.C. – 200 A.D.	9
Period II Phase I	Early Late Iron Age	Characterized by the first evidence of direct maritime trade contact with China and, indirectly, with Middle Eastern countries; period of contact with the so-called "Great Traditions"; simple inhumation burials wrapped in mats; extensive evidence of metal working, weaving, and fishing; pottery objects identified as phallic symbols. The site was used, for both habitation and burial.	Ca. 10th–12th Century A.D.; Associations of trade ceramics from China of Early to late Sung dynasty attributions; Chinese coins from two burial assemblages with the latest dates of 1063 A.D. and 1100 A.D., respectively.	278
Period II Phase 2	Early Late Iron Age	External trade contact with China continues; first appearance of cremation burial, predominantly in jars; a crematorium of hematite, the first substantial prehistoric structure excavated in the Philippines; phallic pottery objects continue to appear. Evidence indicates utilization of the site for both habitation and burial.	Early 13th–14th Century A.D. by radio carbon dating method; trade ceramic associations as well as the burial jars are diagnostically of late Sung/Yuan Dynasty types.	91
Period II Phase 3	Late Iron Age	Abrupt fall in density of population; a period of migrations; complete disappearance of cremation burial and re-appearance of inhumation type of burials; first appearance of export wares from mainland Southeast Asia.	Late 13th–15th Century A.D., by association of early Ming trade wares and export wares from Siam and Annam in mainland Southeast Asia.	17

Notes

1. Rosa C.P. Tenazas, "A Progress Report on the Magsuhot Excavations in Bacong, Negros Oriental, Summer 1974", *Philippine Quarterly of Culture and Society* 2 (3), 1974.
2. R.C.P. Tenazas, *A Report on the Archaeology of the Loocsin-University of San Carlos Excavations in Pila*. Manila, 1968; of. R.C.P. Tenazas, "Salvage excavation in Southern Luzon, Philippines: A Summary", *Philippine Quarterly of Culture and Society* 1 (2), 1973, pp. 132-137.
3. O.W. Wolters, *Early Indonesian Commerce*. New York: Cornell University Press, 1967, p. 154.
4. Harold C. Conklin, "Buhid Pottery," *Journal of East Asiatic Studies* 1 (1), 1953, pp. 1-12.
5. Wilhelm G. Solheim II, "The Functions of Pottery in Southeast Asia: From the Present to the Past," *Ceramics and Man*, Frederick Matson (ed.). New York: Wenner-Gren Foundation for Anthropological Research Inc., 1965, p. 256.
6. W.G. Solheim II, "The Ibanag Pottery Manufacture in Isabela, Philippines," *Journal of East Asiatic Studies* 3 (3), 1954, pp. 305-307.
7. W.G. Solheim II, *The Archaeology of Central Philippines. A Study Chiefly of the Iron Age and its Relationships*. Manila: Bureau of Printing, 1964; of. Solheim, "Pottery and the Malayo-Polynesians," *Current Anthropology* 5 (5), 1964, pp. 360 ff.

In his classic study on the Philippine Iron Age Solheim identifies at least three groups of people that introduced the technology of iron working into the Philippines which he calls the Kalanay, Bau, and Novaliches, after the type sites where their pottery complexes were first recognized.

A pottery complex which Solheim assumes to be a subgroup of the Kalanay is what he calls the Bagupantao. The sharing certain elements of forms with the other complexes such as the ring stand attached to bowls with or without cut-out designs.

8. L.G. Loeffler, "Beast, Bird, and Fish: An Essay in Southeast Asian Symbolism." Paper read in the *Symposium on Folk Religion and World View in the Southwestern Pasific*, 11th Pacific Science Congress, Tokyo, 1966.

9. Rudolf Rahmann SVD, "Shamanistic and Related Phenomena in Northern and Middle India," *Anthropos* 54, 1959, pp. 736 ff.
10. Tenazas, 1974, *op. cit.*, p. 135.
11. W.G. Solheim II, "Notes on Burial Customs in Near Sagada Mountain Province," *Philippine Journal of Science* 88, 1960, pp. 123–131.
12. See attached Table showing the Chronology of Cultural Developments in Pila.
13. Nils-Gustaf Gejvall, "Cremations", *Science and Archaeology*, Don Brothwell and Eric Higgs (eds.) USA: Thames and Hudson, 1965, p. 381. Fragments of any given sample in primary cremation only have an average size of 1.5 – 2.5 cm.
14. Cf. R.C.P. Tenazas, "Notes on a Preliminary Analysis of Cremation Burial," *Philippine Quarterly of Culture and Society* 1 (2), 1973, pp. 137–138.
15. Henry Ling Roth, *The Native of Sarawak and British North Borneo*. 2 vols. Kuala Lumpur: University of Malaya Press, 1968, pp. 146–154; 160–163.
16. The following are some graphic descriptions of secondary cremation burial practices in China and Japan: "Among the Lolo of Yunnan and Sikiang . . . when a person dies, offering of medicine is at once made to him; usually his corpse is placed on a platform. When it completely decays, the bones are removed and washed five times and finally cleaned with fire, that is, burned." The information on Japan states that "bones which have been washed, or burned, and buried for a second time, have been widely found in archaeological sites of Japan; the evidence strongly indicates the past existence of the bone-washing (secondary burial) in Japan." Cf. Shun-Sheng Ling, "The Bone-Washing Burial Custom and Ancestral Bone Worship in Southeast Asia and Around the Pacific," *Academia Sinica* 2 (1), 1955, p. 192.
17. Wilhelm G. Solheim II, "The Prehistoric Earthenware of Tanjong Kubor Near Santubong, *Sarawak Museum Journal* XII (25–26), 1965, p. 17; figs. 6 and 14; plate 10.
18. Marcelino N. Maceda, "Preliminary Report on Ethnographic and Archaeological Work in Kulaman Plateau, Island of Mindanao, Philippines," *Anthropos* 59, 1964.
19. Shun-Sheng Ling, "Ancestral Tablet and Genital Symbolism in Ancient China," *Academi Sinica* 8, 1959, p. 39 ff.

20. R.C.P. Tenazas, "The Boat-Coffin Burial Complex of the Philippines and its Relations to Similar Practices in Southeast Asia," *Philippine Quarterly of Culture and Society* 1 (1), 1973; cf. Loeffler, *op. cit.*
21. H.G. Quaritch Wales, *Prehistory and Religion in Southeast Asia*. London: Bernard Quaritch, Ltd., 1957.

The boat is believed to be an alternate development by riverine maritime peoples of Southeast Asia to the Rainbow-bridge Myth by which means the souls are carried to the afterworld or heaven.

THE INFLUENCE OF TRADE POTTERY ON SOME ASPECTS OF PHILIPPINES CULTURE, A PRELIMINARY STUDY

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Trade pottery occupies a unique position in the study of Philippine culture history for they are used by archaeologists and anthropologists as time-space indicators. The paucity of indigenous written records with some degree of continuity before the 16th century and the absence of any sizeable architectural monuments in the archipelago have led many scholars dealing in the early period of Philippine history to rely heavily on archaeological evidence. Among the archaeological evidences, trade pottery plays a significant role, often overshadowing pottery of local manufacture and other associated finds such as stone, bronze, copper and iron implements, beads, glass, coins, etc. What has made trade pottery such an important tool for reconstructing Philippine cultural history before the Spanish colonial period is the sheer bulk and variety of the finds scattered in many parts of the archipelago some of which were systematically excavated from grave sites. As an indication of the importance of trade pottery in the reconstruction of Philippine history before the 16th century, H. Otley Beyer who pioneered in Philippine archaeology, designated the years between 300 – 850 A.D. as "Pre-Porcelain Age" and the 9th to the 16th C. as "Porcelain Age". Undoubtedly today, we can question the validity of such a scheme of periodization since porcelains and similar wares were all imports from abroad. Nonetheless, at that time it seemed to Dr. Beyer, a reasonable assumption to make.

Today, we no longer accept Beyer's periodization of "Pre-Porcelain" and "Porcelain" Age. However, because trade pottery keep cropping up in excavations they offer the archaeologists another means where by they can draw up a chronology of their finds using dateable trade wares as bases for analogy and comparison. The main purpose in employing trade wares is to throw more light on the earlier periods of our country's history. But the complexity of studying the evidence can be an enormous task in itself, a skill that not every Philippine archaeologist working in the field can master within a short period. Thus a new field of specialization must be developed: that of the study of Asian ceramics and it is for this reason that we in the Philippines welcome this Ceramic Seminar in Jakarta. I thank the organizing Committee, Dr. Soejono, Miss Rumbi Mulia, Mrs. Suleiman for the privelege of participating and learning from the

Workshop and Seminar. I must also express my gratitude to the staff of the Pusat Penelitian Purbakala dan Peninggalan Nasional especially Mrs. Suleiman and Mrs. Satari and Mr. Hasan Ambariy for helping to locate materials for this paper.

The presence of ancient trade wares mostly from China found in numerous grave sites shows evidence of the antiquity and intensity of our contacts with China and Southeast Asia. More often than not, it is the ubiquity of trade wares in our country that has stimulated research into unexplored regions of the country and as an offshoot leads to an examination of the nature and extent of our relations with the rest of Asia. Recent scholarship on Chinese sources like the work of Mrs. Grace Wong show that places in the Archipelago have gained currency at least by the Southern Sung period, places like Ma-it, Sonda, Lu-zon, Sulu, Palawan, etc.

By now the participants of the Conference must be quite familiar with the assemblage of finds in the Sta. Ana site which has been referred to constantly by Dr. Watt in his discussion of Chinese tradeware in Southeast Asia. The grave assemblage in Sta. Ana illustrates the typical type of trade wares which are comparable to many sites in Indonesia. Still earlier than that the Sta. Ana is the site in Butuan City near the city of Cagayan de Oro. You will have to rely on your memory of the slides shown again by Dr. Watt. I would just like to remind you that Butuan is so far the earliest site yielding wares dateable according to Dr. Watt again to the 10th to the 11th C. I show you some examples of typical trade wares from Calatagan, Batangas and again another diagnostic site for the 15th and 16th centuries.

We must bear in mind that trade in ceramics was part of the larger historical developments accelerated by the sea-borne trade. Starting from the late B.C. era to the early A.D. eras, this international trade that linked Imperial China with the Roman Empire up to the Middle East barely touched the Philippine archipelago. Finds of coins, bronzes, beads dateable to this era are far too few and far-in-between to have any significant impact on the archipelago. Not until the 10th century do we get a clearer picture of commercial activities but once drawn into the process the Philippine archipelago was soon to play an important part in the sea-borne trade between China and the Spice Islands. Large quantities of trade wares found in the Philippines is part of the evidence of this trade.

Let us go over some historical records that can enlighten us on the significance of imported wares to the Philippine culture. The chronicle kept by Chao Chu-kuo record the countries trading with China in his book *Chu-Fan-Chih* (1225 A.D.). Chao Chu-kuo was superintendent and

Commissioner of customs in Ts'uan-chou. Based on the report of foreign merchants in the city, he collected considerable data on the people and places of Southeast Asia. Chao Chu-Kuo described a country North of Borneo which he called *Ma-it* and described how early Filipines regarded Chinese pottery.

"On each island lives a different tribe. Each tribe consists of about a thousand families. As soon as a foreign ship comes in sight the natives approach it to barter. They live in rush huts. As there are no springs in the mountains they have to go down the valley to fetch the water. In the most hidden valleys live people called Haitan (the Acta or Negrito). They are of small stature, have brown eyes and frizzled hair, and their teeth shine between their lips. They live high up on the tops of trees, where they dwell in families from three to five individuals. Crawling through the thickets of the forests, they shoot from ambush at passers-by, wherefore they are much dreaded, but if a porcelain cup is thrown towards them they rush on to it, shouting with joy, and escape with their spoil."

What is notable about this report is that even from second-hand information, Chao Chu-kuo describes that two distinct groups of inhabitants are mentioned, one group organized in larger units of about a thousand families and another group who lived in small bands in the "most hidden valleys." We have here the classic division of Southeast Asia population, between people of the plains and those of the mountains, a distinction important to keep in mind as far as the sea-borne trade in ceramics is concerned.

An account of 1574 showed the prestige value of ceramic wares. The report says that the Filipino chiefs were reported to have sent as tokens of allegiance to the king of Spain, "jewels, gold, silks, porcelain and large earthen jars." (Blair and Robertson, III, p. 249).

Again in the same vein, ceramics played an important role in the "tribute bearing missions" as most foreign traders including Asians were regarded in the Chinese imperial court, for among the gifts bestowed by the Emperor on such "missions" were silk, gauze woven of gold and colored thread and ceramics. Berthold Laufer, "Relations of the Chinese to the Philippine Islands". Smithsonian Miscellaneous Collection, IV, Part 2 (Washington, D.C. 1907) 248-251.

Pigafetta's account of the first encounter of the Spaniards with the chief of Cebu noted that there were numerous porcelains and jars. (Blair and Robertson XXXIII, 149-151). Similarly a report of May 8, 1570 narrated that the Spaniards who were on their way to Manila from Panay passed by the island of Mindoro where they learned of two anchored

Chinese vessels. Salcedo was dispatched to reconnoiter the ships and to request their friendship, but the Chinese were hostile so that the Spaniards took possession of the junks. They found many articles, among them were silks, porcelains, cotton cloth, gilded porcelain bowls, gilded water jugs, gold thread and musk. The decks were full of earthen jars and crockery, large porcelain vases, plates and bowls and some fine porcelain jars which they call *senoritas*." (Blair and Robertson II, 75).

These accounts are about trade in general; what is most interesting to us is that they corroborate sampling the archaeological record. Moreover, the records give us the best clue to that overseas trade in the archipelago when the Spaniards came upon the scene, which was well within the control of the Chinese.

The variety of imported ceramics no doubt reflected the equally numerous ways they were put to use. Filipinos at that time must have used pottery as it is now used in many rural areas, for storages of liquids, for fermenting wine, preparing and preserving food. The variety of imported wares particularly the introduction of stoneware and porcelains, reflect at the same time a greater degree of sophistication in cuisine. With Chinaware we can associate the introduction of new plants, recipes and food items. The vocabulary for many of these wares are often similar in Bahasa Indonesia and Tagalog words like *cengke* (clove), *cangkol* (pitcher), *mangkuk*, *cobek* (cup or bowl) etc.

But quite apart from their utilitarian value, trade pottery acquired prestige value and was soon assorted as articles for ritual.

Father Pedro Chirino gave an interesting account of how Filipinos used pottery as offerings to ensure them a safe journey: "While sailing along the island of Panay, I beheld on the promontary called upon the rock as offerings of the voyagers." (Blair and Robertson, XXII, 200–202).

Father Chirino and Father Aduarte also mentioned the ritual use of porcelain for wine-drinking and as receptacles for betelnut (areca catechu) and other paraphernalia for ceremonials. Father Aduarte who was Bishop of Nueva Segovia narrated the destruction of great amounts of earthenware that had been consecrated during pagan worship and which the converted natives brought to him for destruction." (Blair and Robertson, vol. XXII, p. 266). This historical account has parallels in ethnographic reports for vessels used in rituals are believed to have certain powers and explains why Father Aduarte's new converts felt compelled to make the foreign priest risk the danger of getting rid of them, or more appropriate to break their spell.

Pigafetta who witnessed a funeral ceremony at Cebu mentioned that fragrant gums were burned in the dishes. "There are many porcelain

jars about the room containing myrrh, storrr and the strong odored benzoin (Blair and Robertson XXXIV, 173—175). Besides pottery, other objects from China were used such as silk, beads and bells.

A vivid account of burial practices in Luzon is documented in the Boxer Codex (C.R. Boxer: "A late sixteenth century Manila manuscript, translated by C. Quirino and M. Garcia, The manners, customs, and beliefs of the Philippine inhabitants of long ago; being chapters of a late 16th century Manila manuscript, *The Philippine Journal of Science*, Manila, 1958, vol. 87, No. 4, p. 432).

"Others keep the corpse in the house for seven days so that the fluid flows, and in the interim with all that fetid smell they are drinking without halting. Later they remove the flesh from the bones and throw it to the sea; then the bones are placed in an earthen jar with all, or if not, they leave it in their house".

In the same manuscript the burial custom in Cagayan is described: "They bury them in a hole two fathoms deep two mats are placed on top and they put small bits of areca nut, lime, and betel nut. They put two small blankets on each side of the deceased. Two tiny plates on each side. Small jars of oil and other fragrant oils. Two trays one at the head and the other at the foot. Covering everything with earth, and later they build a shelter over the sepulcher." (*op.cit.*, 432). Morga also recounted that the "natives had Chinese bells which were very sonorous and highly valued or carried to war on their boats." (Blair and Robertson, XVI, p. 128).

I would like to throw in something of an archaeologist's puzzle which I believe the participants of the Seminar can easily unravel. Morga wrote: "In Luzon, particularly in Manila, Pampanga, Pangasinan and Ilokos, very ancient clay vessels of a dark brown color found with the natives are hardly presentable, some of a middling size, and other smaller, marked with characters and stamps. It was difficult to ascertain when or where these objects were obtained, whether they could still be acquired or were still manufactured in the islands. The Japanese are said to value them as tea drinking vessels and as show pieces, which were elaborated externally with fine gold embossed with great skill and enclosed them with cases of brocade. These wares were purchased from Filipinos at a very high price" (Blair and Robertson, XXX, p. 243).

Japanese misconception of the real provenance of these brown glazed tea drinking vessels could have been the result of the fact that the Chinese exported such wares only to the Philippines and in great numbers, which gave the Japanese the impression that these wares were made in the Philippines (Fary Cooper Cole, Chinese pottery in the Philippines

with a postscript by Berthold Laufer", *Field Museum of National History Publication*, 162, *Anthropological Series XII*, no. 1 (Chicago 1912): 30-47.

In examining published ethnographic accounts which I will supplement with my field research in Northern Cordillera particularly among the Ifugaos, (in the summers of 1964, 1965 & 1967), we can see that trade pottery were not only simple and practical household utensils, they became interwoven into the fabric of native belief system and many ceremonies were deemed incomplete or improperly performed without them. Specifically rituals needs of the early Filipinos demanded the use of ceramics. Trade pottery assumed the role as status symbols, as gifts to obtain a bride, settle disputes and tribal wars and as legendary and mythical beings. These beliefs must have been stronger and more widespread before the coming of the Spaniards and today persist among the ethnic minorities inhabiting the remote areas of the archipelago.

Chinese pottery were commonly used by the people as a measure of wealth, of social status or simply for ostentation. We can readily say trade wares played an important role in social stratification. This was reported to be the practice among the Subanuns on the Zamboanga peninsula and among the Tinguian of Abra (Cole, *ibid.* 30-40). Any family which had any claim to status and influence strove to acquire and to increase its collection of pottery, especially large jars (the tempayan) which were used for ceremonial drinking. It is interesting to note that the same practices exist among the Kelabits and Dayaks of Borneo. In fact, according to Tom Harrison, in the "long house" the possession of jars and other imported wares has a sign of status. The Tinguian, Subanun, Kelabits and Dayaks preferred large jars which they passed on to their children as heirlooms. Jars, particularly those which have been used for ceremonies like ritual drinking were thought to possess magical attributes.

I am sure that the story of the magical tempayan is very familiar to you. Myths and legends associated with tempayans include tales of wares that could talk, communicate with the dead, help exercise evil forces from the body of the sick or from accursed places. To heal the sick, they were sprinkled with water taken from these enchanted jars.

Pottery were also used particularly among the Subanuns and the Tinguian as bride price. While proposing marriage, the future bride often demanded jars. Noteworthy in this regard is that in the era when head hunting and war parties were effectively curtailed by the government, jars and other trade wares were also used to indicate status and possession of extraordinary powers.

In the settlement of feuds and war trophies, pottery were employed by the Apayaos. An exchange of pottery specially of large tempayans

and dishes and other types of jars could lead to amicable settlement. The terms of the peace agreement was the number of jars that equals the number of heads spared by the stronger tribe (Cole, *ibid*, 15). During the field research in the Northern Cordillera it turned out that compensation for grievance was settled by exchange of jars and pottery vessels.

The use of pottery as percussion instruments in order to conjure the good spirits and ward off the malignant ones has been observed among the Tinguian and Togbanua of Palawan as well as the Northern Cordillera peoples, among the Kalingh, Igorot and Ifugao. In curing rites, bowls and deep plates (mostly celadons and some blue and white) were used by the Banglon (or Shaman) on which she beats a string of shells or pieces of wooden drumsticks meant to summon the spirits to partake of the offerings of food or masticatory preparations, or wine or all of these. I have seen curing rites which involved the use of whole pieces and (pecah-pecah) sherds kept by the Banglon in her box. What she did to cure the patient was to prepare a brew in which pulverized amounts of the sherds were dissolved.

One of the most universal practices among ethnic minorities was ceremonial drinking from large jars. Men (and sometimes the older women too) gather around the large tempayan and sip wine through reed straws. All pottery which were used for ritual acquired extraordinary importance and was never sold nor given away unless to another person who would perform similar rites but usually they were passed on to the children.

Of great interest to students of Asian ethnography is the marked parallelism between the practices connected with fine ware among the ethnic minorities in the Philippines, the Dayaks in Borneo, the Moi in Vietnam. These people bestow extraordinary value upon many trade wares particularly tempayan, celadon and some of blue and white vases and dishes. One observation is notable, they seem not too concerned with provenance but with the quality and special features of the pottery singling out the smoothness and shininess of surface and glaze and the sonority of the wares so that porcelain and other high-fired wares are much valued. In my field research I did not observe any noticeable difference in the usage of dishes from China, Annam or Thailand but there were fewer examples of the latter. It seemed that they did not even know that the wares were imports from foreign lands. Apart from the quality of the surface, they were concerned with shape, specially when they have many different kinds these were special wares for every different type of ritual. But when few wares were available, the same dish was used for percussion and in mixing the concoction to heal the patient.

What can be said about the decorative motifs on the wares, which have symbolic meaning. You are all familiar with such motifs as the dragon, Chi-lin and other animal and floral motifs in trade ware.

Trade pottery has certainly influenced art forms of the ethnic groups in the Philippines. Among those that I observed were geometric motifs on the textiles, on embroidery and some of the decorative carvings. How far this is a direct borrowing from Chinese trade pottery is difficult to say, because from interviews with craftsmen and from long observation, they took motifs not only from trade ware but also from many other sources. There are indeed close parallels between crocodiles and Chinese dragons, between geometric and stylized designs on textiles and carvings with motifs found in Chinese and other trade ceramics. The only example of direct borrowing I observed was a basket which the weaver told me he imitated from a Chinese vase in the shape of a kuan. There are several motifs mentioned in Legazo's paper which are very intriguing specially symbols of fertility, power, virility, etc. But this is an aspect I have not yet investigated (see Legazo Hong Kong symposium 1978).

What conclusions can we draw regarding these practices which require the use of ceramics? Simple ornamentation should not be discounted as is done in Java and Bali where pieces of ceramic shards and the plates or vessels themselves are cemented or placed on the walls. The utilitarian usage need no further discussion but the sacred and the magical need further elaboration. The most elucidating discussion is the one provided by Mr. Legazo and I fully agree with him. Burial practices, ritual drinking, curing rites, head hunting or its substitutes, all of these practices must be placed within the framework of indigenous, animistic religion. The core of this religion is the reverence for ancestors and culture heroes who represent benevolent powers. These are protectors and benefactors of the tribe. Natural phenomena, indeed the whole universe is believed to be charged with powers, energies or spirits both benevolent and malevolent which must be continuously propitiated through elaborate rituals, offerings and other prohibitions. The need to be in constant communion with these powers requires a complex array of ritual paraphernalia, and ceramics imported from abroad figure prominently in these rites. I would hypothesize that imported wares seem to be associated with benevolent spirits. And yet I hesitate to make any strict distinctions because benevolent and malignant spirits can sometimes turn one's fortune the opposite way. First, by withholding favours, in the first instance and or by neutralizing the efficiency of the other.

In this scheme of things, fertility manifested by human regeneration and abundance of crops are fundamental values. It should be important to specify at this point that the tension between good and evil does not

hinge on morality but on efficacy and power. This explains the fundamental importance of headhunting whereby one captures the most effective source of vitality, a human life. Short of this specially so when this practice was prescribed by our government, the constant search for talismans, charms, all sources of magical energy became all that much more intensified. It is within this cultural context that we can understand the ways trade wares were used by these ethnic minorities. What is important to stress is not so much the possibility that these ethnic groups share basically the same culture as that of South Chinese in the Yuan and Sung periods as postulated by Mr. Legazo but that whatever they took from outside were made to fit within the context of their animistic religion. Certain cultural features might be similar such as reference for ancestors and one's elders, but this similarity is entirely of another order, one espoused by two sets of people whose historical background have been different and have gone on to different directions in time. Trade wares were used, revered and prized only in so far as they reinforced the native values and provided the material representation of their own values. Still, with this minor difference, between Mr. Legazo, and myself, I submit that his analysis remains essentially sound.

There is still another important aspect that we must consider with respect to trade wares and this is the system of trade. Anyone doing fieldwork in the Cordillera region if he is alert to events there, would be impressed by the fact that the population up on the mountains were really never as isolated as we would be made to believe by the terrain. Contacts have always been maintained with the peoples on the plains long before roads were built. Communication continued sometimes friendly via trade and even intermarriages and sometimes hostile in head hunting and raids. Goods from the plains and from the mountains were exchanged: salt, dried-fish, cloth, yarns and thread, tools and metal scrap. In turn, forest products such as rattan, beeswax, gold were brought down the mountains. Trade with China intensified these trade between the plains and mountains and brought about further elaboration and specialization of roles according to zones. What emerged is the creation of a relay system of trade contacts traceable all the way from the seacoast to the most interior mountain areas even before Spanish times. In fact, the first missionaries into the region had to rely on such mountain routes to reach their possible converts. This was not only a relay of trade contacts but in time became alliances. The Ilocanos on the plains were the principal intermediaries with the sea merchants, then further inland the Tinguian occupied the intermediate zone, and finally the upland people up into the interior. In tracing these trading routes from the ocean to the mountains, trade ceramic and gongs (the kind which is flat

without a boss also imported from China) were with landmarks or resting areas in-between the zone.

As an extrapolation, something should be said about the impact of trade ceramics on local industry. I suppose it would not be farfetched to assume that indigenous ceramics similar to those types shown to us by Dr. Solheim, (namely the Tabon cave pottery and the Kalanay Pottery) must have suffered severe competition from the imported wares and probably contributed to the swift demise of native wares.

THE DATING OF CHINESE CERAMICS AND ARCHAEOLOGICAL SITES IN SOUTH-EAST ASIA

A preliminary draft

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In this survey a number of archaeological sites in South-east Asia are proposed as providing standard groupings or assemblages of ceramics for different phases within the general period of 11th to 17th centuries.

Butuan, Northern Mindano	Late 10th – 12th century
Kota Cina, Sumatra	12th – 13th century
Pila Laguna, Luzon	13th – 14th century
Trowulan, Java	14th – 15th century
Pasei, Aceh, Sumatra	15th – 16th century
Calatagan	15th – 16th century
Banten	16th – 17th century

Few archaeological sites in South-east Asia were occupied continuously for more than two centuries. Thus, even if there is no reliable stratification (which is usually the case with habitation sites), the ceramic finds from each site usually fall within a century or so in date, and therefore constitute a well defined group for study. The grave sites, such as Calatagan, Sta Ana and Pila Laguna are of course even more useful in providing complete pieces in burial assemblages. On the other hand, even association in assemblages is no guarantee of absolute contemporaneity. A certain "margin of error" must be allowed for in all cases.

The importance of the study of ceramic groups is twofold. First, the known groups would serve as reference sets: for new sites not only for relative dating but for the study of possible trade relations between various sites. A good example for such study is a comparison between the finds from Kota Cina and the Bujang valley in Kedah, Malaysia. Secondly, the association of various types of ceramics will provide clues for dating those which are less well-known. For example, the occurrence of a well-known type of Chinese green glazed ceramics, called by the Japanese *Juko Seiji*, in a 10th – 12th century site in Butuan, will push back the dating of this ware which has always been thought of as Southern Sung at the earliest. Thus, while Chinese ceramic often provide dates for sites in South-east Asia, archaeological data from South-east Asia are also useful in providing corrections to traditional datings of Chinese wares.

The ceramic finds from the Balanghai site in Butan city reported by Evangelista and Peralta provide typical finds from late 10th to early 12th century sites in South-east Asia. The salient finds are a type of Yueh ware with fine incised decoration which has been traditionally dated to the 10th century. However, the occurrence of certain types of Kwantung wares in the form of boxes, bowls and toys, now known to be 11th to early 12th century, pushes the date downwards a little. As mentioned earlier, the finds of the Juko Seiji type of green-glazed stoneware, now known to be made in T'ung-an, Fukien, (and perhaps at other Fukien kilns) make the assemblage even more interesting.

The finds from Kota Cina, a well defined 11th – 13th century site, provide another standard grouping which is sure to be of great importance in the study of contemporary sites in South-east Asia. The occurrence of earlier types of Lung-ch'uan celadon as well as late 11th – 12th century Kwantung types, together with the absence of Yuan celadon and blue and white, argue strongly for a terminal date of – 1300 for the site. The occurrence of certain types of Fukien wares also testify to the increasing importance of ports on the Fukien coast as trading centres towards the end of the 13th century. Of special interest among the wares from Fukien are the yellow, brown and glazed earthenwares from Ch'uanchou and nearby areas.

The excavators of Pila Laguna originally put forth the hypothesis for a late Sung date for the lowest layer of this site, which seem arguable at the time. However, in the light of data from other sites in South-east Asia and the latest archaeological work conducted in kiln sites in China, it would appear that even the lowest layer could not be assigned a Sung date. All the celadons and Fukien white wares recovered from Pila Laguna could have been manufactured in Yuan times; and up to now there is still no firm evidence of the production of blue and white in China before the middle of the Yuan period. As this is the best excavated and recorded ceramic site in South-east Asia so far, its importance will grow as a result of a greater certainty in its dating.

Similarly, the site of Sta Ana in Manila must now be assigned a second half of the 14th century date. Again the rich association of many types of wares in the Sta Ana assemblages will be most useful as reference points in the study of other 14th century sites.

Trowulan, when fully studied, will provide one of the key ceramic assemblages in the whole of South-east Asia. The ceramic finds here confirmed the historical importance of Mojopahit as one of the great international metropolis of Asia in the 14th – 15th centuries. The Chinese wares found here are (mercifully) of only a few types which are easily datable. The Lung-ch'uan celadons of the 14th century seems to predominate with not a few early blue and white wares similar to those found at Sta Ana. It is the occurrence of many types of Vietnamese and Thai

wares at this site which gives it added importance for crossreference purposes in the study of South-east Asian ceramics. The Vietnamese blue and white tiles in themselves form a unique category and deserve special attention in future research. One of the outstanding ceramic wares of Trowulan is the fine-paste finely potted earthenware, varying in colour from buff to red, which is receiving increasing attention from archaeologists of South-east Asia. This distinguished example of the potter's art, typified by the kendi, has been rather overlooked by an earlier generation of archaeologists who concerned themselves more with the more "glamorous" high-fired stone-wares. However, this class of fine earthenware has now been reported from practically every important ceramic site in South-east Asia, covering a period range of about 11th to at least 14th century and a geographical distribution over at least three countries. Examples have been reported from Butuan, Sisachanalai, Sathing Phra, Kota Cina and above all in Trowulan where perhaps the finest examples are found in some abundance. There is as yet no consensus of opinion as to whether this fine earthenware was manufactured in one centre and then exported to other areas, like everything else at the time, or produced locally at the sites where it has been found. Some kilns have been found at Sathing Phra, giving rise to speculations of the export of this ware from southern Thailand. However, I dare say that other kilns will be found at other sites and it is far too early for speculations as to the origin and the trade (if any) in this ware. My own observation is that there seem to be strong local characteristics manifested by examples of this ware collected at the various sites.

So far there has been no discovery of the standard early 15th century blue and white Chinese porcelain from any of the scientifically excavated sites in South-east Asia, although a certain quantity must have been found in Indonesia judging from the display in dealer's shops and collector's drawing rooms. One possible explanation is that the early Ming Chinese imperial edicts forbidding maritime trade were really effective, another is that all the fine porcelain was requisitioned for the official expeditions to the "western seas" led by Cheng Ho. Yet another likely explanation for the apparent early 15th century gap is that the majority of the export wares of this period are very different from those made for the home market, especially those for imperial use, and that we are as yet unable to identify the trade wares of early Ming.

When we come to the second half of the 15th century, the situation is quite different and there are large quantities of mid-Ming ceramics found in a number of sites including Calatagan which is mainly a 16th century site but there is certainly late 15th century material among the finds. The Calatagan assemblages are typical of many sites in South-east Asia and deserve greater study and more precise dating. (Previously, it was thought to be a 14th/15th site, but more recently it has received a "just 16th century" label, neither of which is accurate). Calatagan is, of course, one of the first sites to produce both Chinese and Thai wares

and, although its absolute importance in providing clues to relative dating has somewhat diminished as a result of other archaeological finds, especially the sunken ships off the coast of Thailand, a precise dating of the site would go a long way towards the long drawn out dispute on the terminal dates for Thai trade wares.

Apart from the general characteristics of the potting and the style of the decoration, the late 15th century wares are distinguished by the occurrence as prominent decorative motifs, certain mythical beasts and Buddhist symbols of an Indo-Tibetan origin (such as the double vajra and the makara) and the use of the Lantsha script as border decoration. From the little of what I have seen of the ceramic finds from Aceh, this group of blue and white wares seem to predominate.

Finally, I should like to mention Banten as the type site from the 17th century. However, as I shall be visiting this site just before this Conference I shall leave this part of the paper for completion after the Conference.

I should also like to add that I have chosen the late 10th – 11th century as the earliest period for the present discussion. The reason is that, with the single exception of the finds from Prambanan reported by Mr. Abu Ridho at the Hong Kong Pottery Symposium in 1978, there are comparatively very few scientifically investigated sites in South-east Asia which can be given a firm 9th – 10th century date. It is interesting to note, in passing, that the finds from Prambanan, comprising mainly of Ch'ang-sha and Yueh wares, are very similar to finds from the 9th – 10th century sites in the Persian Gulf – such as Siraf. Ceramic assemblages can therefore be used for comparative study of sites which are contemporary but a vast distance apart.

Abbreviations :

ACASA	Archives of the Chinese Art Society of America, New York
BMFEA	Bulletin of the Museum of Far-Eastern Art, Stockholm
FECB	Far Eastern Ceramic Bulletin, Ann Arbor
JICS	Journal of the Institute of Chinese Studies of the Chinese University of Hong Kong, Hong Kong
JRAS	Journal of the Royal Asiatic Society, Hong Kong
JSSS	Journal of the South Sea Society, Singapore
KG	Kaogu (),
MTPS	Manila Trade Pottery Seminar
OA	Oriental Art, London
PS	Philippine Studies, Manila
SMJ	Sarawak Museum Journal, Kuching
TOCS	Transactions of the Oriental Ceramic Society, London
WW	Wenwu (),

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AN ACCOUNT OF THE MARITIME TRADE ROUTES BETWEEN SOUTHEAST ASIA AND CHINA

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There are basically two principal routes between the Indian Ocean and China, namely the land route from Burma to the Yunnan province of China which is known as the Yun-Chang Route, and the other which is, and more relevant to us, the Jiao-guang Maritime Route whereby ships travelled through the Straits of Malacca and finished their journey at Tongking (Jiao-Zhi) during the early periods, and later on, at Guangzhou (Canton) when the city became more and more important. The final designation of this Route was sometime Qingzhou in the Shangdong Peninsula of China where the pilgrim monk Fa Xian (cir 334-420) landed on his return journey from India in 412. While the contribution from the Silk Route serving as an important channel for the transaction of cultural, religious and scientific information had long been recognized, the similar importance of the Maritime Route to China had not received attention of the same magnitude. Buddhism which entered China through the Jiao-guang Maritime Route produced not only great monasteries and large quantities of translated Sutras, but also exquisite Buddhist art forms which are still discernible in cities such as Guangzhou and Kweilin of South China. The artistic expressions in these works depart completely from those of Yun-kan and Lung-man in the northern part of China where the influence of the Gandhara period and the Asia Minor influence in art dominate. The Buddhist art of south China is a school of art in itself and resembles in style that of the Borobudur in Central Java. Moreover, the Malayo-Austronesian world had long been an indispensable source of natural produces which occupied an important position in the field of medicine and the cultivated life of the ancient Chinese. The historical significance of this Route is illustrated by the widespread existence of Chinese ceramics all over Southeast Asia and along the Maritime Route. Ceramics, though forming a small fragment of the total ancient maritime trade, yet due to its durable quality, is regarded as an essential dating tool to all workers in Southeast Asian studies.

The Jiao-guang Maritime Route had been in use at least as early as the Chinese Han dynasty (206 BC - 220 AD). The well-known paragraph in the *Early Han Annals (Qian Han Shu Chapter 28)* which relates a journey to the Kingdom of Huang-zhi (Kancipura of India?) through the Isthmus of the Malay Peninsula had been satisfactorily reconstructed by many scholars and is well known to us all. (1)

For the period between the 3rd to 5th century, apart from Fa Xian, there were ten monks (3 from Funan, 3 from India, 3 from the

Westward Lands and 1 Chinese) who travelled along the Maritime Route either one way or in both ways. There was also a Chinese mission who has given us the first account of the Indianized Fu-nan (Cambodge). The same mission tells us of a country by the name of Ko-yin which Paul Pelliot identified to be Java. The same account reveals the existence of Fu-nan ships which were said to carry 40-50 people. The account on the 12 countries in Southeast Asia helps us to conclude that there were connections among the different parts of our region in those days.

In the winter of 413-4, Fa Xian returned from Sri Lanka to China. He took a boat which accommodated over two hundred people and travelled with the help of the Monsoon. The route he took was through the Straits of Malacca and he visited the country of Yavadvipa (Sumatra and Java). In those days, the compass was not used in sailing and the navigators watched the sun, moon and stars. In Javadvipa, Fa Xian changed to another boat which could also accommodate over two hundred people. Fa Xian could be one of the earliest carriers of ceramics for he said that he had thrown overboard his kendi (details not available) in a storm.

In his autobiography, Fa Xian disclosed that the normal journey between Javadvipa and Guangzhou took 50 days and while he was in Sri Lanka he saw a Chinese silk fan, one which he had not seen for so long that he burst into tears. These odds and ends help us to conclude that the Maritime Route was in considerable use during this period.

Of all the monks who travelled through Southeast Asian waters during the first millenium, the most valuable account on the Route was given by the Tang dynasty monk, Yi Jing. In 671, he set off from Guangzhou and arrived in Sri Vijaya. From there, he moved on to Malayu (Jambi) and Kedah and crossed the Indian Ocean to the Nicobar Islands. A fortnight later, he reached Tamralipti (Tamluk). In his invaluable book, *Eminent Monks Who Sought The Law In The West During The Tang Dynasty* he recorded the lives of 60 monks and at least 37, and possibly 38, of them who travelled by the sea route to or from India. From his total account, it was clear that to Sri Vijaya, the great centre of Mahayana Buddhism, a visit every monk must pay, for he would be able to find a thousand other monks practising the orthodox Buddhist rule exactly as in India. Sometimes, the overland route was chosen and Langkasuka on the East Coast of this Peninsula Malaysia was used. Places such as Ho-Ling (Java), Po-Li (Bali), Mo-Ko-sin (Mahasin?), Dan-Dan and Pan-Pan (Peninsula Malaysia) were known to all and a visit would be taken to them in the case of a bad weather or in the interests of casual trade.

From official sources, the same route was recorded between 785 — 804 by a Chief Minister of Tang China, Jia Dan, who named the route as *Route from Guangzhou to the Foreigners in the Sea*.

The part concerned Southeast Asia is as follows :

"From Guangzhou, sailing on the sea towards the southeast direction for two hundred Chinese miles, one would reach Tun-mun (near Hongkong), then sail towards the west for two days to the Nine Island Stones (Taya?). Thereupon, one moves southward to the Elephant Stone (Tinhosa?). Travelling in the southwest direction for 3 days, one brings the ship to Jim-pai-lu Mountains (Culao Cham). This mountain is situated in the sea east of Champa. From there moving to the south for two days, one reaches Lin-san (Sa-hoi). Another day, reaching Mun-du, and after another day, reaching Ku-dan (Kanthara), and another half of a day, one would reach Pan-tou-long (Panduranga). From there, two more days, one reaches Gun-du-long Mountains (Pulo Gondore). With another five more days' journey, one reaches a strait which the foreigners call "Zhi" and which is 100 Chinese miles from south to north. On its northern shore is the Kingdom of Luo-yoe (Johore River), on its southern shore the Kingdom of Fo-shi (Sri Vijaya). Some four or five days' journey over the waters to the eastward of Fo-shi is the Kingdom of Ho-ling (Java), the largest of the islands in the south. Then, emerging from the strait, in three days, one reaches the Kingdom of Ko-ko-ceng-zhi (Brouwers? or the north-east Sumatran mainland) which is situated on another island off the northwest corner of Fo-shi. The inhabitants there are mostly pirates. Voyagers on junks go in dread of them. On the northern shore of the strait is the Kingdom of Ko-lo (Kalah, near Mergui). To the west of Ko-lo is the Kingdom of Ko-ku-lo (Qagola, unidentified) to Ceylon to Arabia". (2)

Fifty years after Jia Dan, an Arabian traveller, Ibn Khurdadhbih recorded a similar route taking also a total of 90 days. A contemporary to Ibn Khurdadhbih, Suleiman, started his voyage to China, from Siraf, through Muscate of Oman to Koulam (south India). From there, he moved to Kalah-bar which took 40 days. From Kalah-bar he reached Guangzhou and the rest of the journey took 70 days.

We also owe to Suleiman the earliest Western account on ceramics.

"In China, there is a kind of clay of very high quality. Using it to make into a cup or bowl can produce a utensil as thin as glass. If one uses such ware to contain liquid, one can see the liquid from outside" (3)

Though it is unrecorded in earlier accounts, that Chinese ceramics was widely used as a maritime commodity along this route is an undisputed fact. The Tang and pre-Tang Chinese ceramics that have been discovered all over Southeast Asia and are still being excavated stand to verify this. So do the sherds of Tang three-colours, Yueh ware, Changsha ware, Xing ware that became part of the features of the ancient sites such as Fostat (Cairo, Egypt), Samarra (Persia) and Brahminabad (India).

The frequent use of this maritime route was noticed by all who were at the scene in those days. A Japanese record of a Japanese monk

who visited Guangzhou, Jian-zhen by name, relates his eye-witness account.

He observed that a foreign man (Persian?) spent 300,000 strings of cash to build a Buddhist shrine, employing 60 artisans and taking 3 years to complete the task. There were also 3 Brahmin temples where Indian monks reside. Furthermore :

"In the river of the city, there are numerous vessels, namely : Brahmin (India) ships, Kun-lun (Southeast Asian) ships and Persian ships carrying aromatic products and other treasures which are piled up like mountains. Their vessels are 60 to 70 Chinese feet in length. In this city, all types of foreigners come and go and reside. Many are the races found there". (4)

By the 9th century (Chinese Song dynasty 960 – 1279), the maritime trade became a very sophisticated and specialized affair. Not only were there shipping rules and systems and economic infrastructure for the trade, there was also great advancement made in navigation. The compass was widely in use, and bigger and safer ships which carried five hundred up to 1,000 people, were available. As conditions improved, many more people were engaged in maritime activities. There were many Muslims settling down in the coastal cities of China and some of the mosques they built still stood side by side along the Hindu temples of these days. Similarly, accounts of Chinese traders and Chinese ships appeared consistently in those contemporary records.

It was at this time that there began to emerge detailed Chinese accounts of not just the flora and fauna, or customs and people of the Southeast Asian countries they knew, but there were also accounts of commercial experiences on what goods were brought to these countries for trade and what were brought back in return, to the extent of what type of Chinese ceramics would be favoured in these transactions in barter. Contemporary accounts such as the *Ling-wai-dai-ta* and the *Zhu-fan-zhe* made us realize not only that the African coast was a familiar world to the Southeast Asians and the Chinese, but also that the inter-Southeast Asian waters were established routes of travel. Of the 14 countries in Southeast Asia mentioned, all were buyers of Chinese ceramics and handicrafts for which they traded with their aromatic produces and other natural produces which the Song Chinese used in every part of their sophisticated life.

This flourishing situation in trade continued for the next four to five centuries and Quanshou in south China was described by Marco Polo as the second largest part in the world. He had also commented on Chinese ceramics which he saw and liked.

For information on the ceramics trade, we owe to a Chinese traveller, Wang Da-yuan, circa 1349, a comprehensive account of 99 countries along the Maritime Route. Of the 28 identified Southeast

Asian countries, together with 6 unidentified ones, every one of them was a buyer of Chinese ceramics.

With the compass a standard feature in sailing, and with the availability of bigger and better ships, there was a gradual building up of a compendium of knowledge on depth soundings, on the nature and characteristics of the monsoons, on the tides and shallows, on the constellations and on maps and charts.

It was also around this time that the Jiao-guang Maritime Route developed into the Eastern Ocean Route and the Western Ocean Route. Owing to the dangers near the Paracel Islands and the Macolesfield Bank of which the Song Chinese had long been aware, sailing to Southeast Asia tended to be near the coast of the Indo-Chinese Peninsula. Thus the Western Ocean Route would begin with Vietnam, Thailand, Peninsula Malaysia, Sumatera, Java, Bali and Timor and the ship would return via the southwest and the western coast of Borneo. With the increasing importance of the port of Quanzhou, trading ships tended to set off from there and would touch Taiwan and reach Luzon, then proceeded to the Sulu sea and Sulawesi. Reaching the Moluccas, the ship would then return via the eastern coast of Borneo.

These two routes were in use continuously for the next several hundred years and their reputation was so established that there is a Ming book on maritime travel and trade, the title of which is *Studies of the Eastern and Western Oceans (Dong Xi Yang Kao)*.

Some scholars attributed the scarcity of Ming porcelain in the Sarawak area of the Borneo Island to the adherence of these two routes by the Ming traders.

The 14th century saw the climax of the ancient Chinese maritime activities, for it was in the first half of this century that a governmental mission reached Mogedoxu of the East African Coast in 1422. Among the ordinary traders, knowledge of the maritime trade continually increased, although their activities and development in this direction were greatly hampered by negative government policies. However, there are still left today for examination and as tributes to those ancient mariners, log books, compass charts and information on depths and shallows. The *Wu Bi Zhi* chart though unique, yet is too well known to be used here as an example.

There are in the collections of the Bodlean Library in the Oxford university of England two hand written log books given by Archbishop Laud in 1639 to the Library entitled *Successful Travels (Soon Feng Xiang Xiang)* and *The correct Usage of the Compass (Zhi'Nan Zheng Fa)*. Both are invaluable records of navigation techniques in these days. Apart from having accounts of detailed compass routes, these two books also contain passages on the ways and methods of observing the constellations, of sunrise and sunset, of typhoons and thunder. There were also

descriptions of geographical situations, of the ports and along the routes. In total, these two books cover over 100 routes on inter-Southeast Asian travels, Southeast Asia to China travels as well as travels from India to Arabia. The following routes are listed, in order to illustrate the frequency of travels made in those days and the large numbers of ports visited.

Fujiang to Jiao Zhi (Vietnam) and return
Fujiang to Siam (Thailand) and return
Quemoy to Patani, Kelantan and return
Quemoy to Pahang and return
Guangzhou to Malacca and return
Tioman to Palembang and Bantam and return
Fujiang to Java and return
Vietnam to Cambodge and return
Vietnam to Pahang and return
Cambodge to Patani and return
Thailand to Patani, Pahang and Malacca and return
Tioman to Trengganu and return
Vietnam to Palembang and Bantam and return
Bantam to Timor and return
Bantam to Cheribon and Demak and return
Bantam to Banjarmassin and return
Palembang to Tuban and return
Patani to Timor and return
Quemoy to Tuban and return
Quemoy to Soekadana and return
Atjeh to Bantam and return
Malacca to Atjeh
Atjeh to Ceylon
Atjeh to Bangalore
Atjeh to Calicut
Calicut to Hormuz
Calicut to Aden and return
Calicut to Djofar and return
Cambodge to Pahang and return
Cambodge to Johore and return
Cambodge to Thailand and return
Thailand to Banjarmassin
Tioman to Brunai and return
Malacca to Palembang and return
Luzon to Brunai and return
Japan to Luzon and return
Qianzhou to Brunai and return
Quemoy to Luzon and return
Qianzhou to Pangasinan and return
Qianzhou to Sulu and return

Thailand to Japan and return
 Jakarta to Thailand and return
 Jakarta to Quemoy and return (5)

It is impossible to relate the entire contents of the book. However, a translation of a compass route between Jakarta and Thailand is rendered herewith for your information. Hopefully, it will be regarded as interesting.

"From Jakarta following the 20° direction and sailing for 5 kans (1 kan = 25 nautical miles), then changing to 10° direction for 8 kans; again following 10° direction sailing for 5 kans, one would reach San-ba island (unidentified) and the water there should be 14 Too (1 Too = 5 feet) deep. Using 355° direction to enter the Straits and continuing to use the same direction for 8 kans and if the depth of water is around 8 or 9 Toos, then you are at the right course. If one wishes to go to Palembang, one should turn the end of the ship towards 55° and move straight on. If one wishes to go to Thailand,, follow 55° direction for 3 kans, then changing to 20° for 5 kans and you would reach Jim Island (Nr Bantam), continuing with 20° for 7 kans, you would reach Seven Stars islands (near Banka) and the Lingga Straits. Then following purely north (0°) for 3 kans. Then changing to 10° for 5 kans . . . to Pahang . . . to Kelantan to Songkhla to Siam". (6)

Appendix

I. Relevant Originals

- (1) 漢書卷二八下地理志：
 自日南南塞徐聞合浦，船行可五月，有都元國，又船行可四月，有邑廣遠國，又船行可二日餘，有詭離國，步行可十餘日，有夫甘都盧國，自夫甘都盧國，船行可二月餘，有黃支國……
- (2) 新唐書地理志卷四三下
 廣州東南海行二百里，至屯門山，乃帆風西行二日至九州石，又南行二日至家石，又西南三日行至占不勞山，山在環王國東二百里海中，又南二日行至陵山，又一日行至門毒國，又一日行至志遠國，又半日行至奔陀涼洲，又兩日行到軍突弄山，又五日行至海峽，唐人謂之巂，南北百里，北岸則羅越國，南岸則佛逝國，佛逝國東水行四五日，至河陵國，南中洲之最大者，又西出山峽三日，至葛葛僧祇國……其北岸則國羅國，羅西則哥谷羅國……

(3) Vide FERRAND, G
 Voyage du marchand arabe Sulaymān en Inde et en Chine rédigé en
 851 suivi de remarques par Abū Zayd Hasan (vers 916) (Paris,
 1922). Les classiques de l'Orient, tome viii.

(4) 大和尙果征傳
 江中有惡羅門波斯等船，不知其數，並載香藥
 珍異積載如山，船深六七丈，針子國、大石國、骨唐、凶、黑
道赤道，牙往居住，種類極多。

(5) 兩神海道針經日錄
 福建往定北針流
 福建往通羅針流
 浯嶼往大泥百蘭丹
 太武往彭亨針流
 寺更往磨六甲針
 寧盤往蕉港順塔針流
 福建往瓜哇針流
 赤坎往東埔寮針
 赤坎往彭亨針
 東埔寮往大泥
 暹羅往大泥彭亨磨六甲
 寧盤往丁加奴針
 赤坎往蕉港順塔
 萬丹往池波精妙針流
 順塔往遮里間淡目
 萬丹往馬神
 蕉港往托塔
 大泥往世波針流
 浯嶼往北寮鏡潭
 浯嶼取諸葛擔盤
 阿育回萬丹
 磨六甲往阿育
 阿育往羅里
 阿育往什喇
 阿育往在里
 古里往勿密譚斯
 古里往阿丹

古里往祖法兒
 東浦裏南港往羊架並彭坊西
 東浦裏往烏丁雅奴
 東浦裏往暹羅
 暹羅至馬單
 寧盤往文萊
 購喇咖往舊港
 呂宋往文萊
 松浦往呂宋
 泉州往勒泥即文萊
 港响往麻里忌
 泉州往彭家苑蘭
 泉州往杉木
 暹羅往日本針
 咬啞吧往暹羅針
 咬啞吧回太武劍站

(6) 兩種海道針法用時暹羅咬啞吧針

本港用五發五更子發八更，又用子發五更取三拔
响响打水十四托，開西勢打水六七托，用壬子入峽門，
 用子子八更打水八九托是正路，若收入舊港并尾生
 良寅，入中間有岫是正路，若往暹羅用辰寅三更開，用
 五發五更取遠响用五發七更取七星响及在牙字子
 三更子發五更，一取彭坊港——古蘭丹
 ——珠玑那港口——

II Glossary of Chinese Characters

Champa	占城
Dan-Dan	旦旦州
Dong Xi Yang Kao	東西洋考
Elephant Stone	象石
Eminent Monks Who Sought The Law In The West During The Tang Dynasty	大唐西域求法高僧傳
Fa Xian	法顯
Fo-shi	佛逝

Funan	扶南
Gun-du-long Mountains	軍安弄山
Guangzhou	廣州
Ho-ling	河陵
Huang-zhi	黃支
Jia Dan	賈耽
Jian Zhen	鑑真
Jiao-guang Route	交廣道
Jiao-zhi	交趾
Jim-pai-lu Mountains	占不帶山
Kan	巽
Ko-lo	崗羅
Ko-yin	加音
Ko-ko-ceng-zhi	高葛僧祇
Ko-ku-lo	高古羅
Ku-dan	古丹
Kun-lun	昆崙
Kweilin	桂林
Lin-san	靈山
<i>Ling-wai-dai-da</i>	嶺外代答
Lung-man	龍門
Luo-yue	羅越
Mo-ko-sin	莫訶信洲
Nine Island Stones	九洲石
Pan-Pan	盆盆洲
Pan-tou-long	奔陀浪
Po-li	婆里
<i>Qian Han Shu</i>	前漢書
Qingzhou	青州
Quanzhou	泉州

*Route from Guangzhou to the
Foreigners in the Sea*

Soon Feng Xiang Xiang

Too

Tun-mun

Wang Da- Yuan

Wu Bi Zhi

Yi Jing

Yun chang Route

Yun-kan

Zhi

Zhi Nan Zheng Fa

Zhu-fan-zhi

廣州通商大道

順風相向

地

屯門山

汪大淵

孔編者

義序

永樂道

空同

寔

指亦正法

諾奉石

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FOREIGN CERAMICS DISCOVERED IN PENINSULAR MALAYSIA

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With its dense green tropical jungle, Peninsular Malaysia ¹⁾ sits suspended like a long emerald from mainland South-east Asia, protected from the oceans by the arc of the Philippine and Indonesia - Islands. But although geographically central, its role in the history of the region lays beneath a misty veil. Much has yet to be revealed by archaeologists and art historians. While the monumental ruins of Angkor in Cambodia and Borobudur in Central Java glitter in nearby lands, the depths of Malaysia have yielded only the prehistoric site of Gua Cha in Ulu Kelantan as a major archaeological discovery. Yet, here and there, almost accidental finds offer the promise of a wealth of hidden artifacts and history.

During the centuries of colonialization South-east Asia was artificially broken into spheres of influence according to the political interests of the various European powers. These divisions, combined with often amateurist efforts and uneven scholarship and understanding of local cultures, produced only mosaic pictures of the brilliance and inter-relationships of South-east Asian cultures.

Only recently have studies begun to ignore former colonial political boundaries. A new generation of scholars, rigorously trained and widely travelled in the member countries of the Association of South-east Asian Nations (ASEAN), now recognize the importance of the art historians in the region. Lured by the vast wealth of untapped materials in art, archaeology, ethnology and general history, these scholars are elevating research standards in this region to be on par with those in the more traditional areas of Asian studies.

Malaysia and early Malay history particularly suffered the neglect of British orientalists in comparison with the contributions being made either in Indonesia or Indo-China. "While Dutch scholars", wrote (R.J. Wilkinson in 1939, page 138; see Bibliography), "have done much to throw light on the past history of Sumatra and Java we British have done far less for Malaya". While Wilkinson may have overlooked some isolated but important contributions in at least the journals of the *Straits Branch of The Royal Asiatic Society*, the *Malayan Branch of the Royal Asiatic Society*, and the *Federated Malay States Museums*, he was by and large correct as far as a comprehensive cultural history of Peninsular Malaysia is concerned.

Archaeology in Peninsular Malaysia is still in its infancy. Ancient inscriptions found in Kedah, Province Willesley ²⁾ and Trengganu are among the most important finds but they tell us very little. The Kedah

and Province Wellesley examples are associated with a period on Indianizations that B.C. Chhabra has suggested dates to between A.D. 400 and 500 (Lamb, 1961, page 78), while that from Trengganu reflects the coming of Islam in the fourteenth century. An unfilled gap stretches between these two periods. The earliest known indigenous history, *Sejarah Melayu* ("Malay Annals"), was written only in the early sixteenth century, and even the important question of the exact date for the founding of Malacca has yet to be answered³). In the search for Malay history, therefore, Chinese, Indian and Arab source materials should be examined.

The most important Chinese sources are dynastic histories, but pilgrims and travellers records, encyclopaedias and topographies also contain valuable early references to the Malay peninsula. The accuracy and interpretation of some Chinese records of course presents its own problems, for instance in the identification of place names. Indian literary work, as well as the Arab geographers, on the other hand, make only vague references to the region. And in gathering information for a comprehensive art history of Peninsular Malaysia, the problems are just as great.

No ancient kiln sites, for instance, have so far been discovered. So it is no wonder that the whole of Malaysia was omitted from Roxanna M. Brown's recent book *The Ceramics of South-east Asia, Their Dating and Identification*. The early Malaysian arts can hardly be traced back before the seventh century A.D.; in comparison with the surviving remains of neighbouring lands, West Malaysia appears to have been in a state of cultural isolation. Only after it became part of Srivijaya is there evidence of artistic activities⁴).

The art of the Srivijayan period, eight to thirteenth centuries, reveals early contacts between South-east Asia and both India and China, but its qualities are frequently disappointing. The excavated and restored Shivaite temples of Kedah, for example, are small and crudely built; their structure and sculpture simply do not compare in standard or number with those of Central Java. Because they seem not to have been buried intact with the dead as in parts of Indonesia and Philippines, excavated ceramics from historical sites in Peninsular Malaysia are rarely whole. At the thirteenth century Pengkalen Bujang site Map I, for instance, several thousand fragments of Chinese porcelain were unearthed but not a single complete specimen⁵).

Chinese records mention ancient settlements in coastal areas along sheltered bays and at the mouths of large rivers in Peninsular Malaysia. These must have been trading settlements, and Pengkalen Bujang on the west coast in Kedah is a good example. There initial trade contact was with the Indians and then later with the Chinese.

Since the Malay peninsula was serving maritime as well as overland trade between the Near East and India in the direction and the Far

East including China in the other, it became a meeting place for traders. Indeed those who came by sea sometimes had to wait months for favourable monsoon winds to take them on their way and this opened the opportunities for cultural as well as good exchanges. The impact of trade on Malay social life can be seen even in present days.

Unfortunately many of the old settlements cannot now be located, probably due to the changing coastline of the peninsula where the silting or rivers has often extended the land dramatically seaward. In silted areas one must look for former coastal villages, such as Kota Cina in northern Sumatra⁶⁾, quite a way inland.

The position of Peninsular Malaysia at the tip of a land mass and yet include proximity to large islands offered various advantages. R. Von Heine-Geldern, based on analytical study of archaeological and anthropological material found in the region, theorised that a migration or diffusion of people occurred in prehistoric times from areas of the mainland farther north to other lands and islands in South-east Asia. Because of its position, Malaysia served as something of a land bridge, but it is probable that some people went no farther than the peninsula itself. These people would be the ancestors of present-day Malays and the first to receive the early cultural influences of historical times. Later still, with the establishment of trade and the routes centred on the spice trade, this country became even more important as a port of call and a place of settlement.

A succession of cultural, sociological and religious influences on the country can be proved by the many varied finds that have come to light. These range from crude prehistoric stone tools, soft earthenwares, remains of Hindu-Buddhist shrines or temples to Chinese ceramics, beads, and even European pottery at a later stage.

Besides its strategic position, the peninsula had rich gold and tin deposits and other prized commodities such as an abundance of teak, ebony and camphor, ivory and the reputedly aphrodesiac rhinoceros horn. These resources were well known to the leading Persian merchants who took to sea from early Hellenistic times in their frail boats, using the monsoons and risking their lives against storms, diseases and piracy in order to acquire the most coveted merchandise of the East — spices.

At the beginning of the Christian era Peninsular Malaysian culture was already in the metal age; soon after, the early maritime trade brought other historical and cultural influences. Merchants and other travellers from India and later from China came or passed through, stopping at settlements such as those found in Kedah, Perak and South Johore. The remains in Kedah show a long period of Hindu-Buddhist influence, and at Kuala Selinsing in Perak finds reflect contacts not only with India and China but also with the Middle East.

Since early literary sources make only vague references to this region, past history must rely on archaeology for reconstruction. In this context ceramics, which are among the least perishable artifacts in tropical climate and corrosive soil, present invaluable evidence for dating and revealing the nature of habitation and trading centres. They can also provide clues to the extent and direction of trade patterns and crosscultural influences between countries. The presence of early Chinese ceramics at Pengkalan Bujang, for example, allows us to safely extend our knowledge of the existence of maritime trade back to the thirteenth century if not earlier.

The earliest, pioneering antiquarian research was carried out by Colonel James Low at Province Wellesley and Kedah in the last century and published in 1848. The results of later work were published by I.H.N. Evans in 1925 and H.G.Q. Wales in 1940⁷⁾. Following the interruption in research and archaeology of the war years, there was only some investigation of archaeological sites by P.D.R. Williams-Hunt in 1949, 1950 dan 1951.

But then in 1954 the country leaped into the international lime-light, at least as far as archaeology was concerned, with the excavation at Gua Cha in Ulu Kelantan by G. de G. Sieveking. The find threw light on the prehistory of the entire region and remains the most significant site in Peninsular Malaysia even up to today. Since then sporadic archaeological excavations have centred on a number of areas of interest.

Also in the 1950s, Michael Sullivan and student members of the archaeological Society of the University of Malaya investigated the remains of ancient Hindu-Buddhist shrines and temples in the Bujang Valley of Kedah, and an excavation by Lamb in 1954 led to the reconstruction of the Shivaite temple at Chandi Bukit Batu Pahat (Lamb, 1960). In 1960 the then Museums Department of the Federation of Malaya sponsored two excavations at Malacca and Johore Lama in the southern part of the country⁸⁾. Both of these produced huge quantities of ceramics of all types, from earthenware to porcelain fragments.

The wares at Malacca, as one would expect, were the earlier of the two sites and included many Chinese blue and white pieces of about the mid fifteenth century when the Malacca Sultanate was at the height of its power and prosperity. Those at Johore Lama mainly dated to the sixteenth and seventeenth centuries and included many of the standard types of blue and white trade wares. Together, Malacca and Johore Lama yielded at least 800 shards representing Chinese, Vietnamese and other South-east Asian trade wares.

As a follow-up to his 1959 investigation, Lamb in April 1961 excavated again at Pengkalan Bujang (Lamb, 1961, pages 21 – 37, and 1961b, pages 12 – 17) in Kedah. From this site have come several

thousands of Chinese ceramic shards, most of them celadons of the Sung and Yuan dynasties, along with some fragments of wares from ceramic manufacturing centres in Thailand and Indochina. Other finds include fragments of Islamic glass, parts of small bottles of a type at one time widely exported from the Middle East (i.e. Egypt and Syria) to South-east Asia, especially to Sulawesi and other Indonesian islands. There was also a significant amount of beads. Pengkalan Bujang, it seems, was once a very cosmopolitan trading centre.

In March and April 1962 the Department of Zoology at the University of Malaya, headed by Lord Medway, staged a six-week expedition to Pulau Tioman (Medway, 1962, pages 55–63). The aims of the expedition were purely zoological but in the course of studying the fauna on the island they came across bits of Chinese and non-Chinese ceramics and other artifacts. The shards represented gritty micaceous and non-micaceous earthenwares, grit-free earthenware, brown, buff and green glazed stonewares and celadons. Although the pieces were too fragmentary to be reconstructed into vessels, most of them seemed to represent small rounded bowls. Among them Tom Harrisson identified a Yueh type green ware alms-bowl with folded rim, white glazed *chi'ing-pai* (*ying-chi'ing*) wares of export types, and a fine celadon fragment of Lung-ch'uan type. One shard was identified by Harrisson as Sawankhalok, which he dated as late as the fifteenth century.

Was Kedah in the Pengkalan Bujang area only concerned with entrepôt trade, or was it also a centre for supplying foreign wares to the inhabitants of the interior? Excavations at Calatagan in the Philippines and in Borneo indicate that the inland peoples sought Chinese and other refined ceramics for use as grave furniture. Some of the Pengkalan Bujang ceramics may have also been destined for this purpose; it has been reported that some Malaysian tribes, for example the Senoi, still use imported ceramics for their burial ceremony today⁹). The origins of this burial practice, which certainly deserve further study, seem to go back to ancient times. Indeed, archaeological knowledge of the culturally conservative interior of Peninsular Malaysia is sadly lacking; future fieldwork should encompass this area of the country as well as the coastal plains.

Besides materials from excavated sites, there have been a great number of chance finds of ceramics and other artifacts in the country. Although the museums attempt to trace and purchase if necessary these accidental finds, few have been followed up by archaeological investigation. Yet many of them give clues to sites that could fruitfully be excavated.

In the late 1930s two celadon dishes were found by a couple of Malay fishermen in the river, a few miles upstream from Serokam in the Sidam district of Kedah¹⁰). The dishes were indisputably Chinese, well-fired and heavily potted. The grey-green celadon glaze of both

vessels in the hard felspathic variety, remarkably thick and glossy, and with no crazing or cracks. The smaller of the two dishes has a freely drawn floral pattern incised on the interior bottom and ribbed walls; the larger has an interior dragon design with a pattern of leaves carved on the inside walls. On stylistic grounds B.A.V. Peacock (1959, page 35) is inclined to date both to the beginning of the Ming dynasty, i.e. the fourteenth century.

Another important chance discovery was made in October 1960 by a party of Malay workmen. While digging a drainage ditch at the edge of a wet rice field near Kerubong, seven miles north of Malacca, they uncovered a hoard of buried ceramics including both stonewares and porcelain¹¹). The porcelain comprises blue and white, monochrome and polychrome wares; the stonewares are both glazed and unglazed. Two pieces in the group, an under-glaze blue jarlet with red and green overglaze enamels and a water dropper in the shape of a turtle, are Vietnamese wares; the large unglazed basin within which some of the pieces were found may possibly be from the Sawankhalok kilns of Thailand; and the remainder of the wares are Chinese.

Recently, in 1974, a farmer in Kemaman, Trengganu while digging a hole for a post of his cattle shed came across five ceramic pieces at the depth of about two and a half feet¹²). Two of them are celadons, very similar in form, pattern and the light green colour of the glaze to other pieces found at Pengkalan Bujang, Kedah. One of them, the bowl, is a type especially well represented in Kedah. The interior is plain, but on the exterior, where the glaze is lightly crazed, there is a petal design. In the opinion of William Willetts, present Curator of Muzium Seni Asia of the University of Malaya, it is a Sung dynasty product from the kilns of Chekiang province, South China. The other celadon is a fine jarlet, also thought to date to the Sung dynasty. This piece was unfortunately damaged by the farmer's shovel, and the glaze on the lip is cracked.

Each of the other three pieces is a little globular pot with small mouth. One of these, which has a dull green glaze different in texture from the standard Chinese celadon, is believed to be Vietnamese and date to the fourteenth century. Another smaller round body pot with a dull green glaze, is different in texture to the normal celadons. It has been crudely potted, and the glaze on the exterior has not been properly applied. The last small roundbodied pot, which has been fired at a much lower temperature, is probably also Vietnamese. The glaze on its exterior has badly deteriorated below the mouth.

More recently, in March this year, two Malay workers working on the land owned by a Chinese farmer at Parit Yaani, seven miles from Batu Pahat, Johore discovered a group of blue and white porcelain. The discovery was reported in our local Chinese newspaper, I was directed by the Director General of National Museum Malaysia to inves-

tigate the finds. On the next morning I was able to meet the owner of the land and was taken to the site of discovery. All the scattered shards were collected and brought back to Muzium Negara. On close examination they were found to be freshly broken. The complete pieces totalling about 20 pieces were all taken by the owner to his residence. They comprise big bowls, big plates, plate, *kendi*, saucers and covered boxes of late Ming period. This discovery, typologically reminds me of the similar discovery made at Johore Lama in the early 1950s.

By virtue of section 3 of the Antiquities Act 1976, which says that all the antiquities discovered after 1976 belong to the Government of Malaysia, the finder of such antiquities has to surrender the finds to the authorities. With the cooperation of the District Officer of Batu Pahat, the owner agreed to donate a part of the collection to the Muzium Negara in June this year.

According to my preliminary study, with the absence of other artifacts to indicate habitation activities at the site, the finds seems to be buried there hurriedly for a mysterious reason. Only further research will prove this otherwise.

The above are only a few of the incidental finds of ceramics in Peninsular Malaysia, and these along with the thousands of pieces represented by excavated shards demonstrate that the country is extremely rich in a great variety of foreign ceramics¹³). Whether or not Peninsular Malaysia had its own indigenous ceramic manufacturing centres has yet to be answered; although no kiln sites are known, the search has hardly been adequate.

With each new find questions arise spontaneously. Has this type of ware been found in the country before? How does it fit into the general picture of ceramics discovered in Peninsular Malaysia; Further research will be done to provide an up-to-date survey of the distribution and chronology of these finds in the framework of a typological study, and to facilitate answers to such questions.

Notes :

1. Peninsular Malaysia, also known as West Malaysia, comprises eleven states known as Malaya before the formation of Malaysia in 1963, while Sabah and Sarawak, the other states which joined Malaysia in 1963 are known as East Malaysia. Also once part of Malaysia, Singapore became an independent nation in 1965.
2. For an account of several inscriptions found in Province Wellesley on the Peninsula of Malacca, see Low, 1848, pages 62 – 66 (Bibliography).
3. See the proceedings of the "Seminar on Malacca History", Desember 1976.
4. For more information on this subject see S.A. Jamal and U. M. Yatim, "The Arts of Srivijaya in Peninsular Malaysia", a paper to be included in Album of the Srivijayan Arts, a project on Malay culture by UNESCO, (published in 1980).
5. For more detail on these ceramic deposits see L.S. Heng, 1973 who describes her work as "in part a follow up of Lamb's investigations at Pengkalan Bujang.
6. A great deal of research at Kota China has been undertaken by E.E. McKinnon.
7. Evans, 1927 Wales, 1940, pages 1 – 85, and 1947, pages 1 – 11, Alaister Lamb notes that although Wales had done pioneering research in this field "he often failed to publish his material in anything like an adequate way, so that much of what he discovered we must still see through his eyes only, not having been supplied with plans, sections, sketches or photographs".
8. Matthews, 1961, pages 237 – 242; Solheim and Green, 1965 pages 1 – 75.
9. Information obtained from the Director General, Department of the Aborigines Affairs, Malaysia.
10. See Peacock, 1959, pages 33 – 35. The dishes were first purchased by the then District Officer of Kuala Muda. They are now on display in the Kedah State Museum, Alor Star. The writer wishes to thank Y.T.M. Tunku Abdul Rahman the former District Officer and later the First Prime Minister of Malaysia, for the hospitality extended to him during his visit to Penang recently.
11. See National Museum, 1961, pages 37 – 39; Matthews, 1961, pages 239 – 241. The finds were sold to an antique dealer the day before

the Director of Museum visited the site, but it was fortunately possible to trace the dealer and to recover the articles, some of which are now preserved in the Muzium Negara.

12. This discovery was first reported to the Muzium Negara in early 1976. Mr. Oswald A. Theseira, the Curator of Pre-History of the museum investigated the site. The result of his investigations has been published in the *Federation Museum Journal*, Vol. XXIII, 1978. The writer is indebted to Mr. Theseira for some of the information used in this book.
13. There has been only one attempt to give an overall view of the range of foreign ceramics found in Peninsular Malaysia, and that summary took the form merely of a brief report; see Sullivan, 1962.