The Jar Burial in South East Asia: an Alternative Hypothesis

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ABSTRACT

There is no historical precedent for jar burials in Southeast Asia. The earliest jar burials first appeared c.700 B.C. as part of a highly complex death cult in Palawan. Therefore, I assume that this burial form represents a cultural intrusion from elsewhere in Asia. Archaeologists contend that a cultural link exists between Southeast Asia and South China, yet my research indicates that there is no virtually no evidence for jar burials in South China. Rather North China exhibits a continuous jar burial tradition reserved almost exclusively for infants and children, and only in rare instances for adults. Furthermore these jar burials represent only a small percentage of total Neolithic burials which suggests that "jar burial deaths" were somehow different from other ones.

Though an unusual burial form in North China, jar burials appeared suddenly in great numbers for both adults and children in south Korea-north Kyushu when large scale population movements from North China sought refuge farther east c.300 B.C. Why did the burial tradition change between North China and south Korea-north Kyushu? I contend that the burial traditions of North China required the inhabitants to perform jar burials once they moved away from their ancestral homeland. This explains both the sudden appearance and widespread practice of jar burials in both south Korea-north Kyushu and Palawan.
From the Philippines the jar burial tradition spread elsewhere in Southeast Asia. An analysis of three jar burial sites: Tabon, Sa-huynh and Kalanay indicates that these sites shared a similar funerary tradition while the individual sites exhibit regional specialization of ceramic forms and designs. Though jar burials represent a short lived tradition in Vietnam, the burial form continued in the Philippines from where it spread north and south among the island cultures which remained outside major cultural changes in mainland Southeast Asia.
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CHAPTER I

Possible Cultural Origins for Philippine Jar Burials

I.1. Oriental Jars in Philippine Culture

For centuries oriental storage jars entered the Philippines in vast numbers. As functional wares, these jars served as containers for foodstuffs and other products transported on the Chinese junks. Basically these wares had no intrinsic value other than their durability to withstand the inevitable rough treatment in transport. When the Chinese traders sailed into the Philippines, the indigenes bartered their exotic forest and sea products for precious manufactured goods. Included in this list of luxury merchandise were these utilitarian storage jars. In 1225 Chau Ju Kua, the Superintendent of Foreign Trade at Chuan Chou, writes in his commercial handbook about this early trade between the Philippines and China, and even mentions the bartered porcelains.

The country of Ma-i is to the north of P'o-ni. Over a thousand families are settled together along both banks of a creek (or, gully). The natives cover themselves with a sheet of cotton cloth, or hide the lower part of the body with a sarong (lit., "loincloth")....

When trading ships enter the anchorage, they stop in front of the official's place, for that is the place for bartering of the country. After a ship has been boarded, the natives mix freely with the ship's folk. The chiefs are in the habit of using white umbrellas, for which reason the traders offer them as gifts.

The custom of the trade is for the savage
traders to assemble in crowds and carry the goods away with them in baskets; and even if one cannot at first know them, and can but slowly distinguish the men who remove the goods, there will yet be no loss. The savage traders will after this carry these goods on to other islands for barter, and, as a rule, it takes them as much as eight or nine months till they return, when they repay the traders on shipboard with what they have obtained (for the goods). Some, however, do not return within the proper term, for which reason vessels trading with Ma-i are the latest in reaching home.

The following places belong to this country: San-su ("Three islands"), Pai-p'ü-ye, P'u-li-lu, Li-kin-tung, Liu-sin and Li-han.

The products of the country consists of yellow wax, cotton, pearls, tortoise-shell, medicinal betel-nuts and yu-ta cloth; and (the foreign) traders barter for these porcelain, trade-gold, iron censers, lead, coloured glass beads, and iron needles.¹

Though no indigenous records exist, the Spanish chronicles offer eyewitness accounts of the various usages for storage jars in the Philippines. Pigafetta describes Magellan's voyage around the world and his arrival in Samar where a local chief presented Magellan with foods and a jar of palm wine.

At dawn on Saturday, March sixteen, 1521, we came upon a high land at a distance of three hundred leguas from the islands of Latroni—an island named Zamal [i.e., Samar]. The following day, the captain-general desired to land on another island which was uninhabited and lay to the right of the above-mentioned island, in order to be more secure, and to get water and have some rest. He had two tents set up on the shore for the sick and had a sow killed for them. On Monday afternoon, March 18, we saw a boat coming toward us with nine men in it. Therefore, the captain-general ordered that no one should move or say a word without his permission. When those men reached the shore, their chief went immediately to the

captain-general, giving signs of joy because of our arrival. Five of the most ornately adorned of them remained with us, while the rest went to get some others who were fishing, and so they all came. The captain-general seeing that they were reasonable men, ordered food to be set before them, and gave them red caps, mirrors, combs, bells, ivory, bocasine, and other things. When they saw the captain's courtesy, they presented fish, a jar of palm wine, which they call uraca [i.e., arrack], figs more than one palmo long [i.e., bananas], and others which were smaller and more delicate, and two cocoanuts. They had nothing else then, but made us signs with their hands that they would bring umay or rice, and cocoanuts and many other articles of food within four days.2

Pigafetta also noted the use of large ceremonial jars on an island near Leyte.

Next day, holy Friday, the captain-general sent his slave, who acted as our interpreter, ashore in a small boat to ask the king if he had any food to have it carried to the ships; and to say that they would be well satisfied with us, for he [and his men] had come to the island as friends and not as enemies. The king came with six or eight men in the same boat and entered the ship. He embraced the captain-general to whom he gave three porcelain jars covered with leaves and full of raw rice, two very large orade, and other things.3

In return, Magellan gave the local king a yellow and red garment "made in the Turkish fashion", and a red cap. To the other members of the king's party, he offered knives and mirrors. When Pigafetta and another mate accompanied the king back to the island, he observed:

When I reached shore, the king raised his hands toward the sky and then turned toward us two. We did the same toward him as did all the others. The king took me by the hand; one of

3 Ibid., p.115.
his chiefs took my companion: and thus they led us under a bamboo covering, where there was a balanghai, as long as eighty of my palm lengths, and resembling a fusta. We sat down upon the stern of that balanghai, constantly conversing with signs. The king's men stood about us in a circle with swords, daggers, spears, and bucklers. The king had a plate of pork brought in and a large jar filled with wine.4

I.2. Jar Burials in the Philippines

Other Spaniards later wrote about jars used for burial purposes. In 1640 Aduarte noted that a shipwrecked crew explored the Batanes Islands and located "some jars of moderate size covered with others of similar size. Inside they found some dead bodies dried, and nothing else."5 Don Joaquin Melgarejo also observed that the inhabitants of Batanes Islands performed jar burials.6 In 1770 the Spanish merchant lived for five months on the island and viewed a jar burial ceremony. Though Melgarejo did not actually describe the burial jar, he likened it to an "oven" which was placed in a hole in the ground. Before placing the body in the jar, the father of the deceased removed the personal ornaments from the body and enclosed other belongings e.g. plates, jars, oars.

The archaeological record also indicates that the

4 Ibid., pp.117, 119.
inhabitants of the Philippines used oriental storage jars to perform jar burials. In 1881 Alfred Marche began a systematic exploration of burial caves on Marinduque Island. First he explored the caves southwest of Boak where he discovered both rough earthenware and stoneware burial jars which contained disintegrated bones. A second expedition on Tres Reyes Island uncovered deformed skulls, burial jar sherds, fragments of small wooden coffins, shell bracelets and rings. Later Marche excavated a land burial site where he unearthed "two plain greenish yellow-brown or yellow-green glazed burial jars...." Each contained an earth filled skull and was covered with a plate or bowl. One jar also contained a small ceramic jarlet in which Marche found two gold ornaments. His prize discovery came later when Marche found an undisturbed burial cave known as Pamine-Taan, located to the east of Santa Cruz.

[T]he entrance is a kind of low hole — but, squeezing through the rocks there, I suddenly found myself confronted by a row of coffins placed one on top of the other. At last, here was a burial cave intact!... I forbade my assistants to touch the slightest thing — for I reserved to myself the task and the pleasure of opening everything.

Behind the first row of coffins stood large burial jars. Though several jars were broken, Marche recovered one specimen in perfect condition. He describes the jar as "being glazed over the whole body except the base, and

8 Ibid., p.258.
decorated with two fire-spitting dragons with four claws on each foot." The other burial jars were plain and covered in black or brown glaze. Each jar contained two to four gold ornaments and only a few beads. Marche also discovered two copper or bronze earrings and one finger ring along with an iron knife, one small axe and a hardwood spearhead.

Twentieth century archaeologists also recovered oriental trade ceramics in association with cave burials. Fox and Evangelista explored the caves and burial ledges on Cagraray Island, the westernmost island of three small islands which circumscribe the Albay Gulf. On the ledges and grottos of Hill 1 they found glass beads, shell bracelets, iron fragments and Chinese ceramics among the crushed burial jars and scattered human bones. Beyer identified the trade pottery as fifteenth century brown glazed stoneware from South China (possibly storage jars?) and fifteenth century Xuan De ceramics.

Other jar burial evidence indicates that the inhabitants of the Philippines performed jar burials even before oriental storage jars entered the region. From the Tabon Cave excavations Fox revealed a historically related jar burial tradition which spanned the Late Neolithic to the Developed Metal Age.

Charcoal samples

9 Ibid., p.258.
from Chamber A Manunggul Cave yielded two radiocarbon
dates of $2840\pm 80$ B.P. and $2660\pm 80$ B.P. which establishes
a Late Neolithic date for the first appearance of jar
burials in the Philippines.$^{12}$

The first view of Chamber A was as
dramatic as its setting; numerous large jars
and covers, smaller vessels, skulls and
portions of painted human bones scattered over
the surface of the cave.... Many of the
vessels were either perfect, in nearly perfect
condition, or had merely collapsed in their
original positions. Striking too was the large
number of decorated and painted vessels.$^{13}$

Altogether Fox recovered 78 jars, jar covers, and smaller
earthenware vessels from the surface and subsurface
levels of the chamber. He describes the range of forms
and designs as "remarkable" and suggests that the
assemblage "presents a clear example of a *funerary
pottery*; that is, vessels which for the most part were
potted specifically for burial and ritual purposes".$^{14}$

One noteworthy vessel is a secondary burial jar with
intricately painted, incised and impressed decoration.
On top of the removable lid is a boat in which two
figures sit. The rear figure holds a steering paddle,
the blade of which is missing. The forward person
presumably represents the soul of the dead whose bones
rest in the jar (Figure 1).

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$^{13}$ Fox, op. cit., p.109.
$^{14}$ Ibid., p.112.

Fox believed that actual movements of people introduced the highly complex cult of the dead and the pottery forms, and suggests that the practice emanated from the south and southwest.

...The Tabon Pottery Complex, as discussed, shows striking similarities with the pottery of Niah in Borneo, Malaya, and Sa-huynh in Indo-China and Thailand, but differs greatly from the pottery and artifacts of the central and northern Philippines.\textsuperscript{15}

Though Fox contends that a comparative analysis of pottery characteristics indicates that the jar burial tradition came from the south, he also considers Otley Beyer's "Golden Urn Burial" migration theory.\textsuperscript{16} From the study of pre-war archaeological reports, Beyer concluded that a Hakka tribe from Fujian province or "some other area on the central China coast..."\textsuperscript{17} brought the jar burial tradition to the Philippines c.A.D. third century to c.eighth century. He believed that the "Jar Burial People" first reached the Batanes and Babuyan Islands where they moved down the east coast of Luzon, Samar and Mindanao and across into the Celebes. An offshoot migrated into the Bondok Peninsula of southern Luzon, passed across into Marinduque and Mindoro and from there to the Calamian Islands and Palawan and finally to Borneo where Beyer believed the tradition died out. Though Fox considers a northern origin for the jar burial tradition,

\textsuperscript{15} Ibid., 161.
\textsuperscript{16} Ibid., 159.
\textsuperscript{17} Ibid., p.159.
he rejects Beyer's conclusion that a single Iron Age migration brought jar burials to the Philippines. Fox cites the current archaeological record which indicates that both the jar burial tradition and pottery entered the Philippines before the c.A.D. third century. Also he notes Solheim's observation that pottery from the various jar burial sites show marked differences which is inconsistent with Beyer's view that a single people brought the jar burial tradition.

...It is not reasonable at present, however, to continue to attribute the presence of jar burial in the Philippines solely to the migration of a Hakka people from Fukien Province or the central coast of China during the "Iron Age." Rather, it is now apparent as the author has pointed out ... that jar burial has appeared in the Philippines as a result of a number of distinct movements of people, the influences coming from the south and possibly from the north and beginning in the Late Stone Age. Jar burial in the Philippines also involved much local development and specialization.\textsuperscript{18}

Solheim suggests that the sudden appearance of jar burials is quite possibly the direct result of Nusantao "sailor-traders."\textsuperscript{19} He presents two alternative hypotheses for the origin of these Austronesians.

...Austronesians may have originated in South China and northern Vietnam and, in a first stage of expansion and movement by water, found their way to Taiwan and some of them probably to southern Japan during the 4th millennium B.C., or at least early in the 3rd millennium B.C. By early in the 2nd millennium B.C. they would have been moving into Palawan, western Borneo, and probably into the Sulu Archipelago.

\textsuperscript{18} Ibid., p.160.
with the pre-Sa-huynh-Kalanay pottery. The second stage would then have developed in this general area as hypothesized above. If this were the case, the contact with Taiwan would have been from South China with the hollow tripod form of pottery coming to Taiwan, but the somewhat later movement to Palawan and Borneo coming from farther south where the tripod form was not made. This movement would have to have been well under way by 1500 B.C., as bronze artifacts were being made in northern Vietnam by that date and there are also some indications of plow agriculture by this time. Neither of these culture complexes is indicated in Island Southeast Asia until about 1000 years later.

The second alternative would have both the first and second stages of movement originating in the southern Philippines-eastern Indonesian area. In this case either the Austronesians would be making pottery by 4000 B.C. and the total evolution leading to the Sa-huynh-Kalanay-Lapita pottery would be taking place in this area, or movement would have to be made by the 4th millennium B.C. to the South China area. This would establish an Austronesian population there from which source the Taiwan Austronesians would come, and would allow an Austronesian return to the home area to start pottery manufacture there. If pottery were already being made in the area, the return movement would not be necessary. There is one C-14 date of 4,500±180 B.C. which may be later than the earliest pottery in a site in the Sulu Archipelago..., so this is a possibility. We need more data before we can choose from among these alternatives, or several possible combinations of them.

The second half of the 2nd millennium and the 1st millennium B.C. was the time of very wide movement of the Austronesian-speaking peoples. Passing information around by word of mouth, they must have developed a considerable store of information about sailing conditions in the South China Sea, the various Indonesian seas, the Gulf of Siam, the Bay of Bengal, and probably parts of the Indian Ocean. During the second half of the 1st millennium B.C. a distinct group of the Austronesian-speaking peoples started moving. These were the

If the first and second stages of Austronesian expansion originated in southern Philippines - eastern Indonesia, it is unclear why Solheim assumes that the Austronesians then moved to South China before they reached Taiwan.
ancestors of the different Malay ethnic groups, and they came out of southeastern China. They can be traced by the pottery they made, which was distinct in both form and decoration from the Sa-huỳnh-Kalanay pottery. This pottery showed much less variation in form than the Sa-huỳnh-Kalanay pottery, and had an impressed decoration done with a carved paddle or stamp rather than the incised and impressed (of a different sort) or painted decoration of the Sa-huỳnh-Kalanay pottery. The ancestral culture of these peoples is known as the Geometric Pottery Culture from the geometric designs impressed by carved paddles or stamps on their pottery. This culture developed out of one of the Lungshanoid cultures of South China.

The first five hundred years of movement by these people, ancestral to the different Malay groups, appears to have been primarily to Taiwan and probably north to Korea and southern Japan. In these places they mixed with the people who were there. They were the ones who probably brought the custom of jar burial and the cultivation of paddy rice to Korea and Japan, and they became an important component of the Korean and Japanese peoples. Around 2000 years ago they started moving south into the Philippines and Indonesia, and possibly into Melanesia as well, as simple carved paddle-impressed pottery shows up in numerous Melanesian areas starting at about this time.21

Many scholars have hypothesized that the Southeast Asian culture originally emanated from South China. Heine-Geldern attempted to classify the seemingly orderless remains of stone axes in South China, Southeast Asia and Oceania into three major categories:

1- **Walzenbeil**- an adze with rounded surface and oval cross section.

2- **Schulterbeil**- an adze with marked shoulders.

3- **Vierkanterbeil**- an adze with flat surfaces and a rectangular cross-section.

He asserted that the proto-Malayo-Polynesians originated in an unspecified location in South China from where they carried the Vierkanterbeil culture into Southeast Asia through successive waves of culture. Ling, on the other hand, claims that comparative ethnological studies of ancient Chinese literature on South China show that the Yunmeng lacustrine region of central China was the homeland of the Indonesian branch of the Malayo-Polynesians. Since 1950 Ling and his associates have contended that ancient Chinese literature indicates that the cultural traits of modern Indonesians were widely distributed in South China. Ling believes that "the ancient Malaysians occupied the whole of South China in prehistoric and early historic times and were gradually assimilated into or driven out of the mainland by the late-coming Sino-Tibetans." Other scholars who studied Malayo-Polynesian origins maintain that the Austronesian linguistic family originated in South China. Beyer (1948), Kano (1952), P. Benedict (1942) and W. Eberhard (1943) favor the southeast coast. Peter Bellwood also believes that the early Austronesians originally expanded from South China.

The ethnolinguistic prehistory of the Austronesian-speaking populations who now inhabit virtually all of the Indo-Malaysian Archipelago must be written, at grass roots level, from the linguistic evidence. This is because languages are crucial witnesses to past and present ethnic identity, certainly more so than the items of material culture which are

likely to survive in tropical archaeological sites. ...The reconstructions of the comparative linguists indicate very strongly that the earliest Austronesians expanded from southern China, through Taiwan, and then southwards into the Philippines, Indonesia and Oceania. They had an economy based firmly on agriculture and some domesticated animals, and a technology which included pottery, sailing canoes, and well-constructed wooden houses. The linguistic evidence can also tell a great deal about the geographical patterning of Austronesian expansion, and about certain adaptations which took place in the Austronesian lifestyle. It cannot, however, tell very much about absolute chronology, or many essential details of the changing regional patterns of material culture and economy.23

Kwang-Chih Chang contends that "[n]one of the Malayo-Polynesian origin theories have been checked against the available archaeological facts of South China."24 He compiled a list of proto-Malayo-Polynesian cultural traits as described by Linton, Heine-Geldern, Kroeber, Beyer and many others and crosschecked them with the archaeological data (see Table 1). From the chart Kwang-Chih Chang reached two important conclusions.25

1- The proto-Malayo-Polynesian Culture can now be definitely traced to Neolithic South China.

2- The southeast coast of South China contains the greatest number of proto-Malayo-Polynesian traits.

I.4. Working Hypothesis to Determine Jar Burial Origin

I plan to use Kwang-Chih Chang's conclusions as the foundation for a working hypothesis to determine the

24 Chang, op. cit. p.89.
25 Ibid., pp.91-92.
<table>
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* Traits unable to be archaeologically substantiated omitted.

^ The Southeast Lungshanoid settlements seem to be fairly settled; but this does not prevent the settlers from reverting to older practices when they moved to a new environment.

≠ Seen at Yuan-shan, Taipei, (K.C. Chang 1954b)

* The village plans do not seem to encourage the claim of the proto-Malayo-Polynesian bilaterality (see K.C. Chang 1958a, b)


> Archaeological relics of megaliths have been reported from Szechwan and Laos only (T.K. Cheng 1946: 24-30; Nezu 1942: 233-271), but their existence in other parts of South China seems to be virtually certain according to Chinese historic records (L.C. Hsu 1954: 274-275), though their tie-in with the archaeological cultures is not known.
origin of the Philippine jar burial tradition. If Kwang-Chih Chang is correct: that the proto-Malayo-Polynesian Culture emanated from Neolithic South China, and that the southeast coast of South China contains the greatest number of proto-Malayo-Polynesian traits, then perhaps other Southeast Asian cultural traits not included in the original list came from South China. I specifically refer to the Southeast Asian jar burial tradition. Just as Kwang-Chih Chang checked the available archaeological data against the reconstructed proto-Malayo-Polynesian cultural traits, I plan to analyze the available archaeological reports which include Neolithic burial practices in South China in order to determine whether the inhabitants performed jar burials before the tradition first appeared in Palawan. Before proceeding, I first need to define the boundaries of South China. Many scholars define South China in both cultural and geographical terms.

...Both in geology and geography, South China is sharply demarcated from North China by the crest of the Tsinling Mountains and the Husiho valley (approximately the 33rd parallel) but continues on to the south. In culture history, South China was definitely a part of Southeast Asia throughout the various prehistoric and historic periods until after the Han Dynasty, when the islands and the peninsula, except for its northern fringes, first came under Indian and then European influences.26

I also intend to define South China in both cultural and geographical terms. The current archaeological evidence

from the Qingliangang Culture clearly indicates that an important cultural difference existed between the sites north and south of the Changjiang. Though both regions were heavily agricultural, Kwang-Chih Chang contends that "one cannot be sure that identical crops were planted in the north and in the south." Archaeologists have unearthed rice remains in the south, but none so far in the north. Since the Huaihe valley is on the same latitude as much of Honan, Kwang-Chih Chang assumes that "millets were as important in Shantung and northern Kiangsu as in Honan." Other artifacts also indicate cultural differences. Stone harvesting knives are common in the south, but rare in the north. Similar pottery forms are found in both regions, but the gui tripod, the high-stemmed cup, and the shallow, bowl-shaped body that are common in the north are rare in the south while impressed decorations (cord marks) that are frequent in the south are uncommon in the north. Archaeologists also have unearthed painted pottery in both regions, but the designs vary considerably. In terms of decorative goods, jade ornaments were abundant in the south while decorated turtle shells were conspicuous in the north.

For the present survey of burial traditions, I divide South China along the 32° parallel through the Huaihe valley, just north of the Changjiang. South China then includes the following provinces: Anhui, Zhejiang,

28 Ibid., p.136.
Fujian, southern Henan, Hubei, Hunan, Guangxi, Guangdong, Sichuan, Guizhou, and Yunnan. I omit Southeast Asia from this definition because I find no a priori proof that culturally links the burial traditions of South China with Southeast Asia.

I.5. Early Neolithic Burial Practices

The Neolithic revolution in China saw the emergence of three regional cultures where the cultivation of plants and the domestication of animals occurred. Kwang-Chih Chang identifies the early farming cultures as:

1- Yangshao in the middle Changjiang.
2- Qingliangang and the other related cultures in the Huaihe valley and the lower Changjiang.
3- Dapenkeng along the southeastern coast and Taiwan.

Presently available archaeological evidence points to two regions where the initial switch from the Palaeolithic to the Neolithic way of life occurred, namely the Huang Ho basin of North China, where millets were the center of attention, and the southeastern coastal areas, where there was probably a greater dependence on roots and tubers. Even though the minute links are not yet completely available, there can be no question now that the Yang-shao and the Ta-p'en-k'eng cultures grew indigenously from their respective Palaeolithic bases. The fact that both the initial phase of the Yang-shao culture and the Ta-p'en-k'eng culture were characterized by cord-marked pottery (with incised designs) suggests some kind of inter-relationship of the two, but in view of the very different material inventories in general, it does not appear that either can be regarded as a derivative of the other. The Yang-shao culture was wholly confined to North China, but
the Ta-p'en-k'eng culture resembles in some respects the Hoabinhian culture of Vietnam and the rest of Indo-China, so much so that many issues would depend on a consideration of both cultures.

The third earliest Neolithic center, the Huai Ho and the lower Yangtze plains, is at the moment the least known but, perhaps because of this, the most tantalizing. The early date of this culture — in the fifth millennium B.C. — is the least firmly established of the three, and we do not yet have any inkling as to its precedents. No initial prototypes are suggested in local data, and no Palaeolithic cultures have been unequivocally established on these plains. In fact, there is a real question whether the plains were too marshy — if not mostly submerged — for habitation until the time of Ch'ing-lien-kang occupation. Therefore, until a precedent foundation can be shown to exist here, the Ch'ing-lien-kang and related cultures in the Pacific seaboard must have come from one or both of the other centers — down the Huang Ho from Yang-shao (probably of the pre-Fan-p'o phase) or down the hills and up the coast from Ta-p'en-k'eng.29

The Yangshao Culture centers in the Huanghe basin and includes hundreds of sites from southern Hebei, northern Henan and western Shandong in the east to eastern Gansu and Qinghai in the west; from northern Shaanxi and Shanxi in the north to southern Shaanxi and Henan in the south. Banpo near Xian represents the middle phase of the Yangshao Culture and offers insight into the burial practices of the northern farmers. North of the dwelling area, the Banpo residents buried their dead in a village cemetery. Cheng Te-K'un describes the 130 adult burials as:

...merely rectangular pits about 2 metres deep, arranged in rows. With the exception of two, which yield two and four corpses, respectively, all the tombs each contain only one skeleton usually in extended position, and with five or

29 Ibid., pp.141-142.
six pottery vessels near the legs and feet. One of the tombs yields as many as seventeen pieces of pottery. The ceramic furniture normally includes coarse jars, fine bowls, and small-mouthed bottles with pointed bottoms. Painted jars with high necks, and fine pots with finger-nail impressions are also common. The burial pit of Tomb 152 is lined with wooden planks; and besides four pottery vessels, one of which contains grains of millet, the skeleton has a string of sixty-three bone disc-beads at the waist, one perforated green-jade pendant near the left ear, and three stone pellets under one of the pottery bowls.30

In 1923-'24 Andersson investigated other middle Yangshao burial sites at Banshan in Ningding, Gansu. The cemeteries occupied the tops of four hills that rise behind the village of Paiziping on the western bank of the Taohe. At Bianjiagou Andersson witnessed the excavation of a well preserved skeleton of a 40 year old man. He rested on his left side in a crouched position and was surrounded by twelve pottery vessels.

Each of the five grave sites is situated on one of the highest hills in the district, surrounded by steep and deep ravines, 400 meters above the floor of the neighboring T'ao valley.... These cemeteries must have belonged to the habitations of the same period down on the valley terraces. It then became clear that the settlers in the T'ao valley of that age carried their dead 10 kilometers or more from the villages up steep paths to hill-tops situated fully 400 meters above the dwellings of the living to resting places from which they could behold in a wide circle the place they had grown up, worked, grown grey and at last found a grave swept by the winds and bathed in sunshine.31

Cheng-Te K’un attributes the burial sites of Xindian and Sishiting in the Tao valley to the late Yangshao

Unlike the Bianjiagou inhabitants, the people did not bury their dead on their sides in a crouched position. Rather they interred the deceased without coffins in a supine and stretched position with the head slightly higher than the feet. The grave goods included small bronze buttons, turquoise and other semi-precious stone beads, spindle whorls, bone artifacts and pottery placed near the head.

The Qingliangang and related cultures center on the Pacific seaboard of eastern China from Shandong to Zhejiang. Originally archaeologists placed the early Neolithic cultures of this region within the Longshan sphere of influence, but in 1951 they recognized a new type of prehistoric culture at Qingliangang in northern Jiangsu.

...In the first report of the site the new culture was considered to have begun "after the rise of the Lung-shan culture" and to have ended "prior to the Han dynasty." The stratigraphical relationship between the Ch'ing-lien-kang and the Lung-shan strata at the site at Erh-chien-ts' un, in the city of Lien-yun-kang on the coast of northern Kiangsu, established for the first time that Ch'ing-lien-kang culture predated Lung-shan culture as a whole. The excavations in 1963 at Ta-tun-tzu in P'i Hsien, northern Kiangsu, brought to light a long sequence of development within the Ch'ing-lien-kang culture itself, by now incorporating several subphases, and the excavators were bold enough to date the Ch'ing-lien-kang culture at an early age, "roughly contemporaneous with the Yang-shao culture of Chung Yuan." This is beginning to be substantiated by radiocarbon dates - especially the one from the lower stratum at Ta-tun-tzu, 5625+105 B.P., calibrated to 4580-4410 B.C. - only slightly later than the Pan-p'o-ts' un site.33

32 Cheng Te-K'un, op. cit., p.85.
33 Chang, The Archaeology of Ancient China, p.133.
Kwang-Chih Chang divides the Qingliangang Culture into two regions: one north and the other south of the Changjiang.

...[T]here are very important differences between the so-called Ch'ing-lien-kang culture north of the Yangtze and the so-called Ch'ing-lien-kang culture south of the Yangtze. Undoubtedly both were heavily agricultural, but one cannot be sure that identical crops were planted in the north and in the south. Remains of rice have been uncovered in considerable quantity in the south, but none yet have been found in the north. The Huai Ho valley is on the same latitudes as much of Honan, and there is every likelihood that millets were as important in Shantung and northern Kiangsu as in Honan. Related to this is the fact that stone harvesting knives are common in the south but rare in the north, where a cutting implement consisting of a bone handle and two cutting hooks made of deer teeth is prominent. In ceramics, many common types are found in both areas, but the kui tripod, the high-stemmed cup, and the shallow, bowl-shaped body (instead of the deep, bowl- or basin-shaped body) that are common in the north are rare in the south, while impressed decorations (especially cord marks) that are common in the south are uncommon in the north. Both areas had painted pottery, but the designs are widely different. In the area of prestige goods, jade ornaments were remarkably abundant in the south, but in the north perforated and apparently decorated turtle shells are much more conspicuous.

In the light of differences like these, it appears unwise at this time to classify the early Neolithic cultures throughout the Pacific seaboard as all being Ch'ing-lien-kang. Until additional data become available and better analysis is undertaken, it seems prudent to adopt the following provisional terminology: (1) important assemblages are grouped as regional phases - the Ch'ing-lien-kang phase, the Liu-lin phase, the Hua-t'ing-ta'un phase, the Ta-wen-k'ou phase, the Ma-chia-pang phase, the Pei-yin-yang-ying phase, and the Sung-tse phase; (2) the Shantung and northern Kiangsu phases are assembled into an earliest Ch'ing-lien-kang phase and a later Hua-t'ing culture; and (3) the southern Kiangsu and northern Chekiang phases are put together into an
earliest Ma-chia-pang phase and a later Pei-yin-yang-ying culture.  

Archaeological remains of the Qingliangang phase are limited to northern Jiangsu and Shandong. Wu Shan-ch'ing lists a series of sites which include Erjiancun and Dacun where archaeologists recovered supine and stretched burials with the heads pointing east. Though the archaeologists unearthed few grave goods, they often found a large red bowl which covered the head of the deceased.

...In contrast to the Ch'ing-lien-kang country, with its essentially northern Chinese climate, the Ma-chia-pang country is definitely southern Chinese in climate and vegetation. There is no question, now, that the inhabitants of the sites of this phase were rice growers, since remains of rice grains have been brought to light from the site at Sung-tse in Shanghai (lower stratum) and from Ts'ao-hsieh-shan in Wu Hsien.  

The Majiabang settlements are located on low mounds or along the river banks in the flat low country drained by the lower Changjiang. Archaeologists have determined that the inhabitants separated the cemeteries from the dwelling areas, and the inhumations were single burials with the heads facing north or northeast. The majority of bodies were buried in a prone position, and those unearthed at Caoxieshan had their faces buried in red bowls placed beneath the head.

The Dapenkeng Culture of the southeastern coast represents the third early farming culture in China. The type site is located in Taibei County, Taiwan, and so far 

\[34\] Ibid., pp.136, 138.  
\[35\] Ibid., p.140.
only one radiocarbon date of 5480±55 B.P. is available for the culture. Kwang-Chih Chang claims that the most distinctive feature of the Dapenkeng Culture is the cord marked pottery which ranges in color from creamy buff to dark brown. The principal vessel shapes include large globular jars and bowls with low and perforated ring feet attached to the bottom of some jars. Taiwan was not the only region in South China where the inhabitants used cord marked pottery. Archaeologists have unearthed such pottery throughout South China, the Indo-Chinese peninsula and the Japanese islands. Though Kwang-Chih Chang describes no Dapenkeng inhumations, he places the Nanning, Guangxi burials within the Dapenkeng Culture. From five river sites: Ganzao, Baxun, Qingshan, Changtang and Xijin, archaeologists recovered burials which indicate that the inhabitants performed two basic types of inhumation:

1- supine in single graves.
2- lying on the side with bent limbs in single and double graves.

I.6. The Longshanoid Cultures

After c.3200 B.C. the three regional agricultural centers experienced similar cultural transformations

36 Ibid., p.85.
which resulted in a series of Neolithic cultures broadly alike. Kwang-Chih Chang contends that:

...the later stages of the Ch'ing-lien-kang and related cultures — including the Ta-wen-k'ou culture of Shantung, the Liu-lin and Hua-t'ing-ta'un phases of northern Kiangsu, the Pei-yin-yang-ying and Sung-tse phases of southern Kiangsu and northern Chekiang, the Ch'u-chia-ling culture of Hupei, and the Ts'ao-hsieh-tun culture of Taiwan — are found to be not only similar to one another and to the Miao-tiku II culture of Chung Yuan but also largely contemporaneous.38

The Longshanoid cultures include several sites in eastern and southeastern coastal China. They are classified under five regional headings:

1- The Miaodigou II Culture — western Henan and eastern and southern Shanxi.

2- The Huating Culture — Huaihe plain of northern Jiangsu and southern Shandong.

3- The Beiyinyangying Culture — southern Jiangsu and northern Zhejiang, primarily the lower Changjiang, Taihu and the lower Fuchunjiang.

4- The Qujialing Culture — central-eastern Hubei in the lower Hanshui basin.

5- The Fengbitou and Tanshishan Cultures of the Southeast Coast — Taiwan, Fujian and Guangdong.39

Though each Longshanoid culture occupied a separate geographic niche, they remained interconnected with the others by waterways. The Miaodigou II Culture follows down the Huanghe and Hanshui to the areas of the Qujialing and Huating cultures. These directly adjoined

38 Chang, Archaeology of Ancient China, pp.154-155.
39 Ibid., p.155.
the Beiyinyangying Culture to the south which, in turn connected with the Qujialing Culture through the Changjiang. Fengbitou of Taiwan is separated from the lower Changjiang, but the early Longshanoid cultures of Zhejiang and Fujian provide a cultural link. Perhaps the web of waterways which interconnected these five Neolithic cultures explains why the regions shared similar burial traditions.

At the Miaodigou II site archaeologists unearthed 145 burials, mostly single and arranged in regular rows. The inhumations were in a supine and stretched position with heads pointing south. Another Miaodigou site is located at Wangwan near Luoyang. Archaeologists recovered 39 graves with a variety of burial forms which included supine and prone inhumations.

In the Huaihe plain of northern Jiangsu and southern Shandong another Longshanoid culture emerged. An outgrowth of the earlier Qingliangang Culture, Kwang-Chih Chang places the Huating Culture between the late fourth millennium and middle third millennium B.C.

The prehistoric remains at these sites apparently were those of a single culture with common characteristics, although internal variation and change can be clearly discerned. But this culture has been referred to by various labels, in large part as the result of an accident. Since the sites in Kiangsu were for the most part investigated by archaeologists from the Nanking Museum, whereas those in Shantung were studied by archaeologists in Shantung, the provincial boundary assumed an undue influence on the naming of the culture. The sites in Shantung

\[40\] Ibid., p.157.
\[41\] Ibid., p.157.
have been grouped under the label "Ta-wen-k'ou culture," while other archaeologists prefer a subdivision into three successive phases (Ch'ing-lien-kang, Hua-t'ing, and Liu-lin). Chinese archaeologists recognize this terminological confusion, and we can expect that new and better classificatory schemes will appear with additional data and analytic research.42

Most Huating sites are burial sites which share certain attributes: 1- they are mostly single burials in a supine position with heads pointing east; 2- the graves are rectangular pits, and some have an ercengtai or a ledge around the burial pit formed by a larger opening on top; 3- grave goods included similar tools and pottery though a wide disparity exists in the relative amounts.

In southern Jiangsu and northern Zhejiang archaeologists recovered another Longshanoid culture which they named Beiyinyangying after the important site at Nanjing University.43 The earlier phase characterizes the culture and is represented by a cemetery with 276 burials. All graves were single burials with most bodies in a supine position. Grave goods included tools, ornaments and pottery. Another Beiyinyangying cultural site is located at Songze which contained occupational debris or burials from three successive stages.44 The middle stratum contained 51 graves. All inhumations were single and supine with the heads pointing southeast.

1954 marked the discovery of a new Neolithic culture near Qujialing village in the lower Hanshui basin.45

42 Ibid., pp.158, 160.
43 Ibid., p.164.
44 Ibid., pp.164-165.
Since then Chinese archaeologists have recovered similar cultural remains in the plains and river valleys of the middle Changjiang from eastern Sichuan to eastern Hubei and along the middle and lower Hanshui drainage from southern Henan down to its confluence with the Changjiang. This cultural area covers the whole province of Hubei and parts of Henan, Sichuan, Hunan and Jiangxi.

On the basis of stratigraphic information from the northern sites (in Hsi-ch’uan and Yun Hsien), it seems quite clear now that the Yang-shao culture of a Pan-p’o-related phase reached south to at least this area— that is, to the mountain valleys of the upper Han-shui. It is from this Yang-shao foundation that a new—Lungshanoid—culture, referred to here as the Ch’u-chia-ling, had sprung. The new culture was followed, in the northern part of the region at least, by the Lung-shan culture of the Honan variety. Radiocarbon dates from the Huang-lien-shu site in Hsi-ch’uan (4100±90), Ch’u-chia-ling (4030±100, 4080±160), and P’ao-ma-ling (4160±90) can be calibrated to the 2980-2490 B.C. range, placing the Ch’u-chia-ling culture comfortably within the 3200-2500 B.C. range given to the earlier Lungshanoid cultures.46

The Lungshanoid culture of Fujian and Taiwan began several hundreds of years later than the northern cultures. From c.2500 B.C.—c.400 B.C. the inhabitants of Fengbitou engaged in farming, hunting, fishing and shell fish gathering. Shellmounds constituted a substantial amount of the cultural deposits of the later phase; and in one mound archaeologists recovered a supine burial with the head pointing south.47 The Tanshishan site in

46 Ibid., p.166-167.
Fujian also yielded similar burial remains.\textsuperscript{48} Archaeologists unearthed Grave No. 2 which contained a supine and stretched burial.

Though the earlier Longshanoid sites developed distinctive cultures, certain common elements linked the vast regions.

1. All the cultures had an agricultural base.

2. They had a distinctive repertoire of polished stone implements which included rectangular adzes, perforated knives and sickles.

3. The sites contained a variety of bone, horn and shell artifacts.

4. A prominent feature of the Longshanoid sites is the pottery remains. They fall between the Yangshao and classical Longshan cultures with a mixture of painted, incised and impressed pottery.

5. The regional sites exhibit a cultural uniformity in burial practices. Archaeologists recovered mostly single inhumations in a supine and stretched position.

I.7. Neolithic Local Cultures

The cultural similarities among the five Longshanoid cultures suggest a period of increased interaction and mobility within this vast region, yet unless such

processes continued, regionalization was unavoidable. Kwang-Chih Chang divides the later Longshan cultures into interior and coastal groups. He contends that the Henan Longshan Culture was ancestral to the Shang civilization; the Shaanxi Longshan Culture preceded the Western Zhou Culture; the Shandong Longshan Culture was related to the Eastern Yi peoples; and the Liangzhu Culture was ancestral to the Yue Culture which was characterized by geometric stamped pottery.49

Though Kwang-Chih Chang observes a regionalization of the Longshan cultures, the burial practices show not only an amazing uniformity with the previous Longshanoid cultures, but also a surprising similarity among themselves. The classical Longshan Culture represents a local Longshan culture that centered in Shandong and extended north to the Liaodong Peninsula and south to northern Jiangsu. Archaeologists recovered burials throughout the region which recall the inhumations of the Huating Culture. Those unearthed at Jingzhizhen are supine and stretched burials in single graves with the heads pointing east.50 Rich grave goods accompanied the dead. The Hangzhou Bay Longshan Culture (Liangzhu Culture) recently has been defined by a series of new excavations at Liangzhu, Laoheshan, Shuitianban, near Hangzhou, Qianshanyang near Wuxing, Majiabang near Jiaxing and Qingdun near Haian.51 The regional burial

50 Ibid., p.180.
51 Ibid., p.180.
practices indicate that the inhabitants performed two basic types of inhumations: supine and prone. In two seasons of excavation archaeologists have unearthed 95 graves at Qingdun.\textsuperscript{52} The graves are divided into three layers with the upper layer associated with the Liangzhu Culture. Here archaeologists often recovered supine and stretched inhumations. While Qingdun contained mostly supine burials, Majiabang revealed both supine and prone inhumations in single rectangular pits.\textsuperscript{53}

The extent of the Longshan distribution in the south remains unclear.

More problematic is the extent of the Lung-shan distribution in the southern direction.... The pregeometric Gray Pottery culture of Kiangsi, the Neolithic cultures of Szechwan and western Hupei in the Yangtze Valley, and the Neolithic cultures of the southwest all exhibit strong resemblance to the Lung-shanoid horizon and to some Lung-shan phases. The sites of Wu-p'ing in Fukien and Ying-p'u in Taiwan are unquestionably related to the coastal group of the Lung-shan cultures. Many features of the Ying-p'u pottery—especially the jars with lugs, the ring-footed tou, and the sandy-pottery ting tripods—recall the Liang-chu culture; and the widespread practice of prone burials in central Taiwan in a black pottery context is traceable to the site of Ma-chia-pang. Carbon-14 dates from Ying-p'u place the Lung-shan-type culture in Taiwan in the late second millennium B.C., just a few hundred years later than its counterpart across the Taiwan Strait.\textsuperscript{54}

Southwest China includes the Red Basin of Sichuan, the mountainous and plateau regions of Yunnan, Guangxi and Guizhou, western Guangdong and the upper reaches of

\textsuperscript{52} Nanjing Museum, "A Neolithic Site at Qingdun in Haian County, Jiangsu Province,"\textit{ Kaogu Xue Bao} 2 (1983): 147-190.
\textsuperscript{53} Chang,\textit{ The Archaeology of Ancient China}, p.182.
\textsuperscript{54} Ibid., p.184.
the Changjiang and the Sijiang. Though Neolithic archaeological sites are few, Kwang-Chih Chang is convinced that the Neolithic cultures of the southwest evolved from the local Mesolithic substratum. He even conjectures that agriculture and a Neolithic industry developed in the southwest before the Shang and Zhou civilizations influenced the region. In eastern Sichuan along the Changjiang is the site of Daxi in Wushan. Sichuan Provincial Museum, "The Third Season of Excavation at Daxi in Wushan County," Kaogu Xue Bao 4 (1981): 461-490.

Here the archaeologists recovered chipped and polished stone axes, hoes, chisels, scrapers, clay spindle whorls, and bone needles as well as elaborate assemblages of stone, bone, jade and shell ornaments. The pottery included sandy red, fine red and black pottery. Archaeologists also recovered some painted sherds of jars, bowls and urns, and ding tripods and ring-footed bowls which suggest Longshanoid features of the Qujialing Culture. During a later phase of the occupation, the inhabitants used part of Daxi for a cemetery. They buried the deceased in a supine and stretched position in single graves. The associated burials goods varied with some unusual assemblages: two dishes, one placed on each breast; three painted jars stacked and lying between the legs; an ivory piece beneath the head; and a dog.
I.8. The Shang and Zhou Periods

The archaeological record indicates that the Neolithic inhabitants of South China performed two basic types of burials:

1- stretched and supine burials in single graves often arranged in rows.

2- occasional prone burials also in single graves.

These burial practices exhibit an unbelievable uniformity especially when the extent of the geographic area and the duration of the chronological period is considered. In fact, it almost suggests a Sinic burial tradition which first emerged as early as the fifth millennium B.C. at sites such as Banpo and Jiangzhai near Xian. Here the inhabitants performed supine and stretched burials in single graves with grave goods which accompanied the deceased into the afterlife. From these Neolithic traditions, the elaborate Shang tombs developed. Robert Thorp contends that the Dawenkou cemetery in southern Shandong provides a link between the burial traditions of Neolithic China and the Shang state.

...The Neolithic Dawenkou cemetery in southern Shandong Province typifies the origins of Shang practices. At this cemetery, graves were occasionally equipped with a log chamber (guo) to house the corpse and some of the burial goods. The large and varied assortment of pottery vessels typical of this culture was placed on a ledge or step (ercengtai) inside the four walls of the trench. The people of Dawenkou differentiated grave goods according to the gender of the deceased: sewing needles and spindle whorls were interred with females, and axe heads and other tools with males. Animals, usually pigs, were sacrificed at the grave, and many corpses held the teeth of the
roebuck deer in their hands. The fine pottery from these graves, some of it painted and much of it elegant in shape, may have been a ceremonial ware used in burial rites. Each of these aspects of the Dawenkou graves anticipates Shang burial customs.56

The Shang period dates to approximately 1750-1100 B.C. when the Shang dynasty ruled most of North China.

...The Shang civilization is defined ... as the civilization in China, with distinctive features, largely coterminous with the Shang dynasty, although its beginning dates should be extended (by about 100 years, to 1850 B.C. as an arbitrary figure) to incorporate the immediately precedent period. The Shang civilization definitely includes the civilization of the Shang dynasty but should not be restricted to it. Outside the Shang state there were other states and perhaps other forms of society with a civilization comparable to the Shang's, and these were all parts of the Shang - or Chinese - civilization.57

The archaeological record indicates that the Shang civilization extended into South China. Archaeologists have located important Shang sites in the Huaihe plain, northern Jiangsu and northern Anhui. Though widely dispersed the Shang sites exhibit a uniformity in burial practices. Initially the tombs were small and simple, but gradually the burial pit with a sacrificial pit (yaokeng) and tomb passage was introduced. The basic form became increasingly more elaborate until it reached its climax in such tombs as Tomb No. 1 at Sufutun, northeast of Yidu.58 These tombs established a precedent for royal burials in later dynasties.

58 Ibid., p.261.
Throughout the span of both Shang and Chou periods, cultural constants are met continually in the burials. A typical tomb can be described as follows.... The deceased was interred in a rectangular pit (shu hsueh, or "vertical pit"), slightly or much larger than the size of the body, excavated to a considerable depth. The walls of the pit were vertical or sloped slightly inward or outward. Frequently, about half a meter before the desired depth was reached, a smaller pit was continued to the bottom, which left a ledge around the lower pit for the placement of grave goods (sheng-t’u erh-ts’eng-t’ai or "raw earth second-level platform"). In some cases, the pit was dug clear to the bottom on all four sides, but a ledge of fresh earth was built around the lower part of the pit (shu-t’u erh-ts’eng-t’ai, or "ripe earth second-level platform"). Sometimes niches were dug into the walls for the placement of goods. The floor and the walls were often plastered, and the walls were sometimes painted, occasionally with drapery designs like the inside of a bed or room. At the center of the bottom in many pits was a small square pit (yao-k'eng, or waist-pit, since it was located below the waist of the body) in which an animal, usually a dog, was buried. Then, the bottom and the lower walls of the pit were lined with wooden planks to form a chamber (kuo), in which the body was placed in a wooden coffin (kuan). Grave goods, consisting of utensils, ornaments, weapons, food in containers, and so on, were placed in the coffin, outside the coffin in the wooden chamber, or outside the chamber on the ledge or in the wall niches. The pit was then filled with earth, often pounded in layer by layer. Many larger graves had, in addition to these elemental components, one, two, or four ramps that ran from the ground to the floor level of the pit. Bodies of sacrificed humans and animals, and sometimes chariots, were buried in various spots in the tomb (in the wooden chamber, outside in the pit, on the ledge, under the floor of a ramp, or in the fill) or outside the pit in separate graves nearby, depending on the size and elaborateness of the burial.59

59 Ibid., p.357-358.
I.9. Neolithic Jar Burials in China

Though the archaeological record indicates that the inhabitants of South China often performed supine and stretched burials in single graves, there is also evidence that the people of both North and South China performed jar burials. On Map 1 I have located 38 Neolithic jar burial sites of which four are found in South China: Baiyangcun, Yunnan; Dadunzi, Yunnan; Beixin, Shandong; Guanmiaoshan, Hubei.

While archaeologists have recovered jar burials in South China, the vast majority are located along the Huanghe and Weihe with the predominate concentration around Zhengzhou. At Yuanyangchi in Yongchang, Gansu archaeologists unearthed 34 children’s graves of which five were jar burials. The burial jars have been described as ordinary cooking vessels with soot still apparent on the surface. Most were coarse, sand-tempered jars with bowl, saucer or even stone slab lids. Inside the upright burial jars, the archaeologists found poorly preserved children’s bones and sometimes a few grave goods. They believe that jar burials were performed only for newly born infants. Cheng Te-K’un also observes the use of jar burials for children at Banpo in Shaanxi.

The inhabitants buried babies and small children in pottery jars which were interred within the settlement.

61 Cheng Te-K’un, op. cit., p.81.
near the houses. He describes the "coffin-urn" as composed of three parts: a large mouthed and flat bottomed coarse red jar covered by a *bo* bowl which has perforations in the bottom and this, in turn covered by a *wan* bowl (Figure 2).

The majority of jar burials contained the remains of babies and small children, but archaeologists occasionally have unearthed adult jar burials. So far I have located four sites: Jiangzhai, Shaanxi; Yudao, Shanxi; Tumen, Henan; and Quigongcheng, Henan. The Quigongcheng Neolithic site is located on a solitary island at the confluence of the rivers Sha and Dang. Here archaeologists recovered 22 jar burials near the house foundations. Those unearthed on the west side of the settlement contained infant bones while the remaining five excavated on the east side yielded adult skeletons. The adult burial jars and lids are especially noteworthy (Figure 3-5). The main container is a *guan* with five regular earthenware knobs which suggests that the inhabitants perhaps tied cords around the knobs to secure the lid. Inside archaeologists recovered a well preserved adult skeleton. The skull sat in the middle of the jar with the pelvis underneath while the femur and spinal column rested against the opposite walls. The bone arrangement suggests secondary adult inhumations. The Banpo-Yangshao site of Jiangzhai contained 45

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Neolithic graves of which 33 were single burials in a supine and stretched position. The remaining 12 inhumations were jar burials which included one adult secondary burial. The burial jar consisted of two vessels: a sand tempered red jar for the base and a grey earthenware pen for the cover (Figure 4-3). Inside the burial jar archaeologists found a secondary burial of a 40+ year old toothless woman. The Tumen Yangshao site also contained secondary adult jar burials. In 1959 archaeologists recovered two cylindrical flat bottomed jars with covers which recall a similar vessel form unearthed at Quigongcheng (Figure 5-8). The jars contained adult skulls and limb bones. Later in 1960 and 1962 an additional ten adult secondary jar burials were found. Though archaeologists unearthed Yangshao remains at Yudao, only the Longshan period of occupation contained jar burials. One held the teeth and femur of an older child or an adult. Archaeologists consider an adult inhumation reasonable because the "coffin-urn" consisted of five interlocking vessels, a length sufficient to hold an adult body.

Though the archaeological evidence indicates that a

jar burial tradition existed in China, the distribution of the sites suggests that the burial tradition centered in North not South China. Furthermore the reports show that the inhabitants performed two types of jar burials:

1- infant and small children.

2- secondary adult burials.

Children often were buried in discarded cooking vessels which consisted of a series of interlocking units or a lower jar in combination with a bowl-like lid. The rather casual use of cooking vessels and the general absence of burial goods suggest that the inhabitants placed little importance on such burials. While children were buried often in discarded cooking vessels, the adults seem to have received more preferential treatment. Of the four adult jar burial sites, three contained expressly designed funerary jars. The archaeological record also notes another possible distinction between adult and child jar burials. Though bones are often decayed, the few skeletal fragments indicate that child jar burials are primary, adult ones usually secondary.

The survey of burial traditions of South China indicates that the inhabitants of both North and South China practised similar types of burials. Both regions preferred supine and stretched inhumations in single graves and occasionally performed prone burials. Grave goods usually accompanied the deceased and included pottery, ornaments, tools and/or weapons. There is also evidence that the inhabitants of both regions performed jar burials but only infrequently. The number of jar
burial sites in South China are particularly scarce with the majority located in the North. Such a distribution pattern suggests that the jar burial tradition centered in North China and later moved southward. Despite the greater number of jar burials along the Huanghe, this burial form still represents only a small proportion of the total number of graves unearthed. Archaeologists have excavated literally hundreds of Neolithic settlements, yet they have recovered only 34 jar burial sites in North China. Furthermore, the jar burials they have unearthed usually represent a small fraction of the burials at any given site. For example, the Tugutai site near Lanzhou contained 84 graves of which one was a jar burial; and the Yuanyangchi site at Wuwei, Gansu yielded 189 graves of which five were child jar burials.

I.10. A Comparison of the Jar Burial Traditions of China

and Tabon

A comparison of the Neolithic jar burials of North and South China with the Late Neolithic jar burials of Chamber A Manunggul Cave reveals four major differences:

1- The inhabitants of China rarely performed jar

burials. The infrequency of jar burials in North China differs from the widespread use of jar burials in the Philippines. Chamber A Manunggul Cave represents the first appearance of jar burials for which Fox established a chronological sequence which spanned the Late Neolithic to the Developed Metal Age. He based his study on a comparative analysis of artifacts from six jar burial caves though he considered pertinent data from seven others. Not only did Fox observe numerous caves which contained jar burials, but also he noted that jar burials represent a major type of burial.

...This jar burial and pottery complex first appeared in the Tabon Caves during the Late Neolithic and persisted, as probably the major type of burial in this area, until the Developed Metal Age; a time span from about 1500 B.C. to 500 A.D., and possibly later.69

The preponderance of jar burials at Tabon contrasts with the preference for supine and stretched burials in China. At Tabon Fox unearthed only two other types of burials in association with jar burial assemblages: supine burials and bundle burials. "In contrast to the data from nearby Borneo ... however, the range of the types of burials in the Tabon Caves is not great; rather strikingly uniform."70

2- The inhabitants of North China often performed jar burials for children and infants while Fox observed that the Tabon burial jars contained adult and child remains.

69 Fox, op. cit., p.67.
70 Ibid., p.74.
The bones of children, juveniles, and adults of both sexes were placed in jars; rarely infants. The paucity of infant bones may reflect a past cultural pattern. Today, many indigenous Filipino groups do not ascribe socio-religious status to newly born infants. It could also be due to a more rapid disintegration of infant bones.\textsuperscript{71}

Though infant jar burials are scarce, Fox excavated numerous adult jar burials which he describes as secondary inhumations because the burial jars were not large enough to contain a primary adult burial. As to whether the burial jars contained multiple inhumations, Fox remains unclear because he found no undisturbed jar burial sites. A comparison of the vessel counts from each cave with the individual remains suggests that the bones of only one person rested in a jar.

3- The inhabitants of North China rarely buried grave goods with the jar burials. Archaeological reports indicate that the jar burials of North China contained few funerary objects. The lack of ceremony which surrounds these burials contrasts with the elaborate burial assemblage discovered in Chamber A Manunggul Cave. Fox unearthed 78 jars, jar covers and smaller earthenware vessels whose form and range he describes as:

\begin{quote}
...remarkable and to the writer, at least, presents a clear example of a \textit{funerary pottery}; that is, vessels which for the most part were potted specifically for burial and ritual purposes.\textsuperscript{72}
\end{quote}

Other burial goods included jade and onyx beads, eight bracelets, a jasper ear pendant, and a red colored

\textsuperscript{71} Ibid., p.70.
\textsuperscript{72} Ibid., p.112.
chalcedony (?) pendant.

4- The inhabitants of North China buried the jars within the settlement near the houses and not in a separate cemetery. Cheng Te-K’un and other archaeologists describe the location of jar burials near the foundation of houses while the other supine and stretched burials are placed away from the settlement in a community or clan cemetery. The rather casual disposal of jar burials in North China contrasts with the elaborate methods involved in placing burial jars in Chamber A Manunggul Cave.

...Manunggul Cave is 375 feet high and to the south of Tabon Cave, and was not discovered until nearly two years after the excavations were begun in nearby Tabon Cave. The cave can only be reached from the side by passing through a gap in the cliff under an overhanging limestone bridge and then by climbing a sheer cliff. It was necessary to construct a perpendicular ladder, ten meters in length, in order to work in the cave. The view from the mouth of Chamber A of the South China Sea and nearby islands is truly magnificent. Certainly this cave was selected as a burial site, as were others, because it formed a majestic setting for the dead, and in spite of the difficulties which would have been encountered in placing the many large jars in the cave.73

A comparison of jar burials in North China with those in Palawan indicates that there are major differences in the way the two traditions were performed. Even though the survey of burial traditions in South China proves that the inhabitants performed jar burials, the regional distinctions suggests that perhaps the Southeast Asian jar burial tradition emanated from

73 Ibid., p.109.
another Neolithic source. Besides China there are three other regions which claim jar burial traditions which appear to predate Chamber A Manunggul Cave: Japan, Indonesia and Vietnam.

I.11. Jomon Jar Burials
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Otsuka outlines the Jomon burial system and notes that child jar burials first appeared in Early Jomon though they became more prevalent from Middle Jomon onwards. Kidder lists Jomon shell mounds which contained jar burials:

<table>
<thead>
<tr>
<th>Period</th>
<th>Mound</th>
<th>No. of pots</th>
<th>No. of skeletons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Jomon</td>
<td>Kuroya shell-mound, Saitma</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Samukaze shell-mound, Chiba</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Middle Jomon</td>
<td>Samukaze shell-mound, Chiba</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Late Jomon</td>
<td>Sanganji shell-mound, Fukushima</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arayashiki shell-mound, Chiba</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yahagi shell-mound, Chiba</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tsugumo shell-mound, Okayama</td>
<td>2</td>
<td>about 165</td>
</tr>
<tr>
<td>Latest Jomon</td>
<td>Hosoura shell-mound, Iwate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obora shell-mound, Iwate</td>
<td>7</td>
<td>about 14</td>
</tr>
<tr>
<td></td>
<td>Nakazawahama shell-mound, Iwate</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Numazu shell-mound, Miyagi</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inariyama shell-mound, Aichi</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yoshigo shell-mound, Aichi</td>
<td>44</td>
<td>about 337</td>
</tr>
<tr>
<td></td>
<td>Ikawazu shell-mound, Aichi</td>
<td>1</td>
<td>about 20</td>
</tr>
<tr>
<td></td>
<td>Hobi shell-mound, Aichi</td>
<td>8</td>
<td>33</td>
</tr>
</tbody>
</table>

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This list presents some idea of the widespread practice of shell mound jar burials from its beginnings in Early Jomon. Archaeologists also have recovered open air and pit house jar burials. Some discussion surrounds the jars unearthed in the floors of the Middle Jomon pit houses. These Middle Jomon settlements include clusters of 20 or more round shaped pit dwellings, dug to the surface of the loam with four or six large post holes and a central fireplace. Within the pit houses, archaeologists unearthed a profusion of pottery: pots buried in abandoned pit houses, under house floors, in old post holes, and under stone piles. Though no bones have been found, Watanabe claims that these jars contained infant remains which the inhabitants buried below the floors while the house was still in use. He does not believe that the jars originally were buried in abandoned structures. Kirihara suggests that the location of the jar within the structure determined their use: the jars on the north side of the house are for storage and those on the south side or near the entrance are for burial. He believes that the inverted bottomless burial jars contained either infant remains or placentas, and that the heavy stone which served as a lid kept the child's spirit inside.

While the Jomon people performed child jar burials,

76 Ibid., pp.474-475.
77 Ibid., p.475.
78 Ibid., p.475.
they often buried adults in either a flexed or supine position. Otsuka divides the Jomon period into Early, Middle, Later and Last stages. He claims that flexed burials characterize the Early stage while the Middle stage witnesses both flexed and supine burials. In the Later stage archaeologists unearthed more supine than flexed burials and in the Last stage flexed burials were predominate. Kidder also notes a variety of Jomon adult burials and even mentions the isolated occurrence of a child and adult jar burial at Yoshigo.

The methods of burial were not fully standardized, nor does difference in time seem to be a factor in the variation of procedures. About half were carried out in a flexed position in the majority of which heads were oriented towards the south-east; others may be extended, and pointed in all directions of the compass. Of the former, the great percentage were laid on their backs, legs drawn up, but some were deposited on one side fully flexed. Others lie face down, knees near the chest; or extended on the back, side or face. At the Yoshigo shell-mound one of the skeletons was surrounded by a black organic substance interpreted as a burial mat that must have enveloped the corpse, and two skeletons at Ubayama, and similarly at Tsugumo and Ataka, lay by burnt earth and charcoal remains made by a fire perhaps sacrificial in nature. The bones themselves were unmarked by the fire. Traces of red ochre, particularly on skulls and chest-bones, are to be seen on quite a number of skeletons primarily in North Japan and most frequently on children. This may mean that a secondary burial system was in practice by some groups. Other isolated occurrences are of interest: at the Satohama shell-mound, Miyagi, an elderly man and child were buried in an embrace, both in flexed position, and at Yoshigo bones of an adult and child were found together in a clay jar. Flat circular stones were occasionally placed on the chest of the deceased for protection. The best example of this is at Ko, Osaka prefecture, where the

80 Otsuka, op. cit., pp.154-177.
skeleton of a fully flexed male adult lying on his back was weighted by a stone 6 inches in diameter, and large pieces of pottery were carefully deposited on either side of the head. Covering the body with stones and placing stones beside the head were also done.

More formal modes of interment include the surrounding by stones of the human remains, known from a number of sites in North Japan, and burial in a large jar. A total of thirty-nine jars for children were discovered at Yoshigo. In the 1951 work there, seven urns were uncovered, and of this number four contained the bones of children. This burial method was also used at Obora in Miyagi. The 1919 excavation of an entire infant's remains in a vessel at the head of an adult skeleton in the Tsugumo shell-mound, Okayama, has received due attention. All of these jar burials are late and most only slightly precede the Yayoi period, if at all, and could well be contemporary with the incoming Yayoi custom of urn burials in north Kyushu. The Yahagi shell-mound, Chiba, yielded a jar with a child's bones; this jar was thicker than the other pottery from the site and is Horinouchi in type of Late Jomon.81

The isolated occurrence of a single adult-child jar burial does not alter the fact that the Jomon people usually buried adults in flexed or supine positions and reserved jar burials for infants and children. The exclusive use of jar burials for the young suggests that the Jomon jar burial tradition is not similar to the Tabon practice of jar burials for both adults and children.

I.12. Late Neolithic Jar Burials in Niah

The Niah Caves form an impressive network of passages in the Gunung Subis limestone massif near Niah

in northern Sarawak. The system has many outlets, and the West Mouth is the largest site which naturally divides into two main sections: the well lit, semi-dry dwelling area and the darker, guano-covered burial area. Here Tom Harrisson conducted a massive excavation where he unearthed 166 burials. Supine, cremated and burnt burials characterized the Neolithic with supine inhumations the most common. Barbara Harrisson describes 59 cremations and burnt burials which she found in small wooden coffins, baskets or burial jars. Four burial jars contained cremated remains and another five contained burnt bones. Of particular interest is Jar 159 located in situ with most of its lower body, compressed bones and associated artifacts intact (Figure 6). Originally the jar had been placed only half buried in the ground, perhaps leaving the shoulders exposed above the surface. A cone shaped vessel, probably the broken lower portion of a smaller burial jar, served as a cover, and a small spherical bowl had been placed inside. The burial jar also contained burnt wood which yielded a radiocarbon date of 3175±105 B.P. (Geochron C-14 no. GX-1428).

Three other jars (63; 67/69; 190) compare closely with Jar 159 though two (63, 67/69) are probably

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82 Bellwood, op. cit., p.176.
84 Ibid., p.178.
Inside Jar 63 Harrisson recovered a small metal object:

A small, verdegris-corroded metal object, probably a knife was placed inside jar burial (63). This is the second metal tool from the site (the other occurred with extended burial (36).... There are also indications in the cemetery's sub-surface of metal presence which were left in situ for further study. These remains consist of small compressed patches of verdegris. This and other evidence may bring forward, in time, the presence of metal in Borneo - adding to other recent archaeological discoveries of bronze and iron in South-east Asia, all of which are tending to push back the dates for metal contacts in the area.87

The metal artifact suggests that Jar 63 contained a Metal Age burial, yet the two radiocarbon dates of 3260±100 B.P. for Jar 69 and 2710±85 B.P. for Jar 67 point to an earlier date.88 Such chronological inconsistencies often mar the Niah Cave evidence.

The Niah evidence thus presents some major problems. On the one hand there is a very large series of radiocarbon dates, but mainly on collagen or apatite and of uncertain reliability. On the other hand there are large numbers of artefacts, but it is almost impossible to associate the vast majority of them in any convincing way with the dated bones. Nothing short of massive re-excavation, perhaps now impossible, can resolve this problem.89

Until further research proves otherwise, I plan to eliminate the Niah Caves as a possible cultural homeland for the Tabon jar burial tradition. My reasons are:

1- The single radiocarbon date for Jar 159 stands

86 Barbara Harrisson, op. cit., p.178.
87 Ibid., p.179.
89 Bellwood, op. cit., p.257.
as an isolated phenomenon and its chronological relationship with Chamber A Manunggul Cave remains uncertain.

2- Harrisson recovered 166 burials of various types of which only nine were jar burials. This number represents a small percentage of the total number of burials and suggests that jar burials were not a major burial form. This phenomenon contrasts with the almost exclusive practice of jar burials at Tabon.

3- The Niah Cave jar burials contained cremated remains and burnt secondary burials. Neither burial form was practised at Tabon.

4- The Niah Cave jar burials had virtually no associated burial goods while Chamber A Manunggul Cave contained a burial assemblage which included expressly designed funerary pottery and associated ornaments.

5- The West Mouth of the Niah Cave served as a habitation and burial area which contrasts with the single purposed use of the Tabon jar burial caves.

I.13. Late Neolithic Jar Burials in Vietnam

Another possible region with a Late Neolithic jar burial tradition lies north in Vietnam, yet chronological inconsistencies also plague the Vietnamese data. The Lung-hoa site north of Hanoi supposedly belongs to the Phung-nguyen culture and reveals Late Neolithic burial practices as performed in northern Vietnam.90

90 Hoang xuan Chinh, Bao cao khai-quat do’t I di chi Lung Hoa (Hanoi: Doi kao co, 1968), p.52.
Archaeological evidence indicates that the deceased were buried often in simple pit graves with highly polished stone tools, clay pots and polished and drilled stone bracelets. Archaeologists also found two pairs of interlocking earthenware jars (Figure 7). Even though these jars contained only black earth with no skeletal remains, Vietnamese archaeologists still consider the vessels early jar burials. Scholars date Lung-hoa to the Late Neolithic although they believe the site is not as old as Phung-nguyen. At Phung-nguyen archaeologists found no metal artifacts while they recovered a stone mould at Lung-hoa which suggests that the inhabitants knew bronze casting. Another site particularly rich in stone moulds for implements and weapons is Dong-dau which Jeremy Davidson claims is "... undeniably Bronze Age and, from all indications, later in date than Lung-hoa."\(^9^1\) Carbonized wood collected at Dong-dau in April, 1969 yielded a radiocarbon date of $3328\pm100$ B.P. which implies that bronze casting in northern Vietnam possibly began during the second millennium B.C.\(^9^2\) If Davidson is correct that Lung-hoa preceded Dong-dau, then the two pairs of Lung-hoa jars should predate c.1400 B.C.

Such an early date for both the Lung-hoa site and jars is highly suspect for several reasons. Firstly the $3328\pm100$ B.P. date is based upon a single radiocarbon

\(^9^2\) Ibid., p.117.
test which by itself is virtually valueless. Secondly the radiocarbon date does not even come from Lung-hoa, but rather from a supposedly later site. And lastly the Lung-hoa report includes an artist's drawing of the two pairs of jars. The general form of the jars suggests a much later period. In particular the jar designated as M.4 has high, curved shoulders which sharply angle inward to a splaying neck, while the everted rim indicates precision cutting. Furthermore the M.4 jar bases are flat and the inverted upper jar of the M.3 pair is actually concave. Hence I reject the early date associated with the Lung-hoa jars until the Vietnamese archaeologists complete a more definitive site report proving otherwise.

Other evidence of jar burials comes from southern Vietnam. In the vicinity of Sa-huynh French archaeologists unearthed extensive jar burial fields and believed that the Sa-huynh culture centered in the Nghia Binh and Dong Nai provinces. Since 1975 the Vietnamese archaeologists have identified 38 other Sa-huynh sites.93 These recent discoveries indicate that the Sa-huynh culture evolved from the Late Neolithic to the Iron Age and that the culture extended from the Hai Van Pass in the north to the southernmost point of central Vietnam. Vietnamese archaeologists have divided the Sa-huynh culture into three periods: early, middle and late. Each

period and region have unique characteristics though certain characteristics remain constant over time for all sites. The most common feature is the jar burial tradition itself. Other noteworthy characteristics are: long necked tools; bracelets with an isosceles cross section; ring shaped and lugged earrings; earthenware with acute angles at the bottom and shoulders; and decorative motifs on the earthenware which includes circles, triangles, rectangles, curved lines and combinations of these forms.94

Archaeologists have identified early Sa-huỳnh in the lower layers of Bau Tram, Long Thanh, My Tuong, Han Do and Truong Xe. Features particularly representative of this period are: stone hoes which are oval shaped with a narrow neck; bull-toothed shoulder adzes; earthenware spindle whorls with circular motif; lightly carved fish hooks; bamboo shaped stone beads; lugged stone earrings; large egg shaped burial jars with large shoulders and no necks; high footed bowls with a large rim; miniature earthenware pots; and a few earthenware pots decorated with paint.95

From the charcoal samples unearthed at Long Thanh I archaeologists obtained two radiocarbon dates of $3370\pm40$ B.P. (1.6m.) and $2875\pm60$ B.P. (0.6m.) respect-

94 Chu van Tan, "Sahuỳnh, a Civilization Type of Metal Age in Vietnam" (paper presented at the 12th Indo-Pacific Prehistory Association, Penablanca, Philippines, 1985), p.29.
95 Ibid., p.29.
ively. Though the report includes the stratigraphic location of the samples, it does not indicate where the archaeologists recovered the charcoal samples with respect to the burial jars. The credibility of the entire report rests on this information because if the Long Thanh I samples are unrelated to the burial jars, then the Late Neolithic date for early Sa-huynh jar burials is meaningless. Further complications arise when the archaeologists use the Long Thanh I jar burial-stone tool assemblage and its associated radiocarbon date to identify other sites. At My Tuong, 14 miles from Phanrang, archaeologists recovered two jar burials which contained the skull and long bones of 1-2 year old children. Inside the jars they also recovered burial goods: Jar 1 contained 800 shells and a small jar; Jar 2 had shell beads, "unspecified ornaments", two small jars and animal bones. The burial jars themselves differed in shape. Jar 1 consisted of two interlocking vessels with the upper jar broken and found inside the lower one. Jar 2 was a single unit described as spherical with a splayed neck, red brown in color and decorated with lines on the bottom. The report dates the site to early Sa-huynh because the archaeologists unearthed two jar burials in association with a stone tool assemblage as was also the case at Long Thanh I. Such chronological and cultural

97 Pham quang Son and Pham duc Manh, "Khai-quat di tich My Tuong (Thuan Hai)," Nhung phat hien (1979): 142-144.
generalizations are meaningless. In northern Vietnam archaeological sites also contained jar burials yet archaeologists did not describe these sites as Sa-huỳnh. A specific case are the five burial jars unearthed at Thieu du’ong in the Ma River Valley.\(^{98}\) If archaeologists had initially unearthed these five burial jars, would they also have described the site as Sa-huỳnh? At Thieu du’ong the burial jars contained the remains of children just as they did at My Tuong. Possibly the similarity in these jar burials suggests that both regions shared a child burial tradition which is totally unrelated to the widespread use of jar burials in the Sa-huỳnh culture. Furthermore identifying a site in Southeast Asia as early or late based upon the presence of metal is extremely misleading.

Paralithic culture is yet another characteristic feature of Vietnamese sites which cannot escape notice. The use of stone implements from earlier periods is known ... and the continued use of stone as a material for all sorts of items during the Bronze Age ... and down into the Iron and modern periods has been observed by many scholars .... In fact, one cannot discuss Vietnamese sites without constant reference to, and awareness of, the stone artefacts found alongside metal ones, paralleling them, copying them ... and sometimes providing the inspiration for them....\(^{99}\)

The other two sites described as early Sa-huỳnh are as suspect as My Tuong. Archaeologists describe Han Do (Thuan Hai) as a jar burial site though they recovered


\(^{99}\) Davidson, op. cit., p.104.
only one burial jar. The jar is spherical in shape with a flat bottom and flaring mouth which recalls the shape of the reddish brown My Tuong jar. The archaeologists contend that the similar pottery forms suggest that Hon Do and My Tuong are possibly contemporaneous. In 1978 Vietnamese archaeologists excavated four sites in Phu My (Nghia Binh): Truong Xe, Go Loi, Thuan Do and Chanh Trach. Located 63 kilometers northwest of Qui Nhon, Truong Xe lies on a sand dune 7-10 meters above a neighboring swamp. The archaeologists dug three pits of varying depth and retrieved one bull-tooth style adze, three quadrangular adzes, four small chisels, seven stone grinders and a rice pounder. In both pits 1 and 2 they also unearthed burial jars. Burial jar 1 consisted of two parts: a large lower jar and a smaller one which interlocked with the main body. Inside was a small jar. The report gives no measurements; no jar descriptions nor jar contents. From Pit 2 archaeologists also found another burial jar. They described this jar as large and egg-shaped with a small jar and another pot inside. They believe that the egg-shaped jar is a Sa-huynh cultural feature while the small jar recovered from inside the Pit 1 burial jar recalls a similar Long Thanh I pot. Thus the Vietnamese archaeologists conclude that Truong Xe is an early Sa-huynh site.

Not only chronological inconsistencies, but also data gaps mar the Vietnamese reports. So far I have been unable to determine whether both Long Thanh I and Bau Tram contain burial jars. Chinh and Tien contend that the early Sa-huynh culture occurs in the lower layer of Bau Tram and Long Thanh. They describe a highly distinctive assemblage of artifacts which includes an abundance of stone implements and ornaments as well as various pottery types, "the most noticeable being the large jars."\(^{102}\) Though Chinh and Tien claim that "[t]he most common characteristic of the Sa-huynh Culture is the jar burial,"\(^{103}\) they do not specify whether the "large jars" are burial jars and whether both sites contained these vessels. The same vagueness surrounds the Ha van Tan report. He states that archaeologists have discovered pre-Sa-huynh habitats and jar burials at Long Thanh but does not mention Bau Tram or describe the burial jars. He finds the pottery inside the burial jars "very well finished and finely decorated."\(^{104}\) He also describes the other pottery types and even provides drawings while the burial jars which supposedly characterize the Sa-huynh culture remain unreported.

Without more definitive information, I cannot determine whether both Long Thanh and Bau Tram contained burial jars nor can I surmise the jar contents or the


\(^{103}\) Ibid., p.60.

\(^{104}\) Ha van Tan, *op. cit.*, p.8.
numbers unearthed. Such information gaps present numerous problems if I am to specify the region from which the Tabon jar burial tradition emanated. To summarize:

1- If the Long Thanh I radiocarbon samples represent cultural intrusions or were contaminated or unrelated to the burial jars themselves, then Vietnam does not have the earliest jar burials in Southeast Asia.

2- If Long Thanh I contained only one or two jar burials and the burials were child inhumations, then Long Thanh does not belong to the Southeast Asian jar burial tradition.

3- If Bau Tram does not contain burial jars, then Vietnam has only one Late Neolithic jar burial site with two questionable radiocarbon dates. This phenomenon makes Long Thanh a cultural anomaly with no chronological continuity with the later Sa-huỳnh urn fields.

I suggest that, until Vietnamese archaeologists re-investigate and clarify the early Sa-huỳnh data, these sites should be dropped from the analysis. This means that the Sa-huỳnh jar burial tradition is a Metal Age and not a Late Neolithic cultural phenomenon.
CHAPTER II

Asian Jar Burials in the Early Christian Era and Later

II.1. A Chronological Sequence for Jar Burials in the Philippines up to A.D. 500

Jar burials first appeared in Chamber A Manunggul Cave in the Late Neolithic and continued as a major burial form in Palawan until after the China trade commenced in the Song and Yuan periods.

The caves on Lipuun Point for which definitive data from excavations are available, twelve in all, as well as Duyong Cave in the Iwaig area, have clearly revealed one historically related jar burial tradition and pottery complex; and surface collections from many other caves within the Quezon area show a collateral tradition. This jar burial and pottery complex first appeared in the Tabon Caves during the Late Neolithic and persisted, as probably the major type of burial in this area, until the Developed Metal Age; a time span from about 1500 B.C. to 500 A.D., and possibly later.

The tradition of burying bones in jars and hiding the jars in caves continued in western Palawan until well after the beginning of Chinese trade. Burial jars have been found in caves in association with Chinese trade pottery of the Sung Dynasty (960 to 1279 A.D.) and the Yuan Dynasty (1280 to 1368 A.D.). But new types of earthenware potteries are associated with the later burials in stoneware jars of Chinese origin. Jar burials in caves during the proto-historic period are rare, however, and accidental finds and surveys on the east coast of Palawan show that the people at this time were burying their dead in open sites rather than placing them in caves. Secondary burial in Chinese stoneware jars, though not usual, was reported ... among the neighboring Tagbanwa of Central Palawan as late as the early twentieth century. The jars with human bones were also interred by the Tagbanwa. Elsewhere in the Philippines ... jar burial is
still practised.¹

Fox developed a cultural and temporal sequence for the jar burial caves based upon a comparative analysis of specific artifacts e.g. stone tools, bronze and iron fragments, glass beads and pottery. He divided the Jar Burial Complex into three periods: Late Neolithic; Metal Age: Early Period with Bronze, Jade and Ancient Glass; Metal Age: Developed Period with Iron. Chamber A Manunggul Cave represents the Late Neolithic period with an abundance of jade beads and bracelets in association with a developed jar burial tradition. The Early Metal Age was a brief period of about 500 years from c.700 B.C.–c.200 B.C. Fox believes that "[i]f the Late Neolithic persisted in Palawan to after 700 B.C., then this transitional period would have been even shorter, 500 B.C. (or later) to 200 B.C."² Fox claims that the lingling-o earring is the diagnostic ornament of the Early Metal Age while iron characterizes the Developed Metal Age (Figure 8).³ Chamber B Manunggul Cave yielded a Developed Metal Age jar burial assemblage with a radiocarbon date of 2140±100 B.P. which establishes an absolute date for the first appearance of iron in Palawan.

While Palawan was perhaps the first region in the Philippines to use iron, the archaeological evidence

² Ibid., p.164.
³ Lingling-o is a term used in the Philippines for a split, round earring with projections on three or four axes. The word has been adopted by archaeologists to describe similar ear ornaments which appeared on both sides of the South China Sea c.400 B.C.–c.A.D. 200.
indicates that elsewhere the island inhabitants performed jar burials in association with stone tools.

It should be emphasized that iron did not reach all of the areas and islands of the Philippines at this time, the Stone Age surviving into even the Christian Era in some regions.4

Solheim also sees no archaeological evidence for the rapid diffusion of iron in the Philippines and claims that iron is not common until it is found associated with Chinese porcelains. In the Albay-Sorsogon region Fox and Evangelista discovered numerous jar burial sites. They systematically excavated the Bato Caves of which caves No.1 and No.2 were used for burial.5 A preliminary report indicates that the jar burials formed "one related assemblage."6 Initially the archaeologists thought that Cave No.1 contained only two burial jars embedded in the interior limestone ledge. Later they recovered an additional 16 large jars and numerous smaller vessels. Each earthenware burial jar contained disintegrated human bones, a few sea and land shells, shale and shell beads, shell objects e.g. shell spoons and in one instance a polished stone axe. Another stone axe was found near a crushed jar, and two flake knives inside other jars. The four polished stone tools identified the caves as belonging to the "Late Neolithic" tradition, yet Fox and Evangelista obtained a radiocarbon date of 2050±200 B.P.

4 Ibid., p.164.
6 Ibid., p.50.
for shell samples.

We were exhaustive in our efforts to discover the presence of iron but absolutely no metal was uncovered. This is highly significant since an association of stone tools and stone beads with pottery was found. We are of the opinion, therefore, that the people who lived and buried their dead in the Bato Caves made pottery and used stone tools and that they possessed no iron or other metals. It is, of course, possible that iron fragments were overlooked (they are often difficult to distinguish and disintegrate rapidly); however, all of the soil in the excavations was carefully screened leading to the recovery of such objects as minute shale beads but no iron. Moreover, as we were consciously looking for iron artifacts, as well as for glass and other objects normally associated with early Philippine pottery, it is very unlikely that iron would have gone unnoticed.7

Fox and Evangelista later excavated other jar burial-stone tool assemblages on Cagraray Island which yielded an identical type and range of associated artifacts as those unearthed in the Bato Caves. They explored two caves in the Misibis-Kagbulakaw area where the larger cave contained "the richest stone tool-jar burial site that the authors have excavated and should, perhaps, be the type site for this assemblage in the Albay Gulf area."8 Though nearly all the cave assemblage was buried under tons of rock and earth, Fox and Evangelista recovered and transported over 700 tons of burial jars and associated artifacts back to Manila for analysis. In their preliminary report the archaeologists recorded a cave inventory which illustrates the range of

7 Ibid., p.52.
materials in the jar burial-stone tool sites of the Albay region.

**Objects Made of Stone**

9 polished stone axes (Beyer's "Late Neolithic" types)
2 portions of stone axes (Beyer's "Late Neolithic" types)
5 polished stone gouges (Beyer's "Late Neolithic" types)
1 stone earring (similar in basic form to the Chinese Tai-ki emblem)
24 flake knives
3259 minute beads (size of large pin head) made of a blue-green indurated shale
228 medium size blue-green, indurated shale beads
189 large blue-green, indurated shale beads
5 disk-like stone objects (one is definitely worked)

**Objects Made of Shell**

23 tubular beads
85 small round beads
174 medium size round beads
90 large round beads
1 perforated shell object
2 scoops made of large Cone shells
1 dipper made of the "Bailer Shell" (*Melo diadema*)
3 portions of shell spoons made from the Chambered Nautilus

Though Fox and Evangelista sifted all the earth removed from the cave, they found not a single fragment of iron or porcelain which suggests that the inhabitants used stone tools and *not* iron.

This jar burial-stone tool assemblage has now been found in eleven different sites at Mataas and Misibis, Cagraray Island, and at Bato, Sorsogon, all of which yielded an identical type and range of associated materials - blue-green beads made of an

indurated shale, beads made of other hard stones or of the shell of the giant clam (*Tridacna* sp.) spoons made from the Chambered Nautilus, scoops made of Cone shells, dippers made of "Bailer Shells" (*Melo diadema*), knives made of a large flake struck from a core, bracelets made from the top of large Cones, and a plain undecorated pottery with high flaring necks and with approximately the same percentage of angle and slipped ware. The decorated ware, representing only a small percentage of the pottery, appears to be related to the Kalanay pottery found by Wilhelm Solheim II and the junior author in Masbate. It is significant that not a single fragment of iron or sherd of porcelain was found in these eleven sites and *insofar as the chronology of the Albay Gulf area is concerned* these are undoubtedly pre-iron sites. Even if it were argued that iron was not put in the jars, the habitation rock shelter at Bato, Sorsogon, which is associated with this assemblage, yielded stone tools in the midden but no iron. The authors wish, however, to point out that iron may have been present elsewhere in the Philippines, particularly in central Luzon, at the time of this stone tool-jar burial assemblage, and that the presence of stone tools may be due to their persistence in a marginal area during a period in which iron was a precious commodity.¹⁰

**II.2. Iron As a Time Marker**

Fox and Evangelista believe that the archaeological evidence on Cagraray Island indicates that the inhabitants performed jar burials during two distinct periods: the Early Christian era in association with a stone tool-jar burial assemblage; the proto-historic period (c.A.D. 15th century) in association with porcelains and iron. They claim a thousand years separate the two jar burial traditions. Such a

¹⁰ Ibid., p.67.
chronological gap is not reasonable, and suggests an error in basic assumptions. Both Fox and Evangelista suppose that stone tools date a site to an earlier period than iron implements. In the Philippines this is not always the case. Even as late as the sixteenth century Pigafetta noted the scarcity of iron in the islands and the desire of the inhabitants to obtain the metal in exchange for their abundant supply of gold:

On Friday we showed those people a shop full of our merchandise, at which they were very much surprised. For metals, iron, and other large merchandise they gave us gold. For the other smaller articles they gave us rice, swine, goats, and other food. Those people gave us x pieces of gold for xiii libras of iron (one piece being worth about one and one-half ducados) The captain-general did not wish to take too much gold, for there would have been some sailors who would have given all that they owned for a small amount of gold, and would have spoiled the trade for ever.11

Pigafetta also describes the inhabitants of Palawan and their weapons.

Those people of Polaoan go naked as do the others. Almost all of them cultivate their fields. They have blowpipes with thick wooden arrows more than one palmo long, with harpoon points, and others tipped with fishbones, and poisoned with an herb; while others are tipped with points of bamboo like harpoons and are poisoned. At the end of the arrow they attach a little piece of soft wood, instead of feathers. At the end of their blowpipes they fasten a bit of iron like a spear head; and when they have shot all their arrows they fight with that. They place a value on brass rings and chains, bells, knives, and still more on copper wire for binding their fishhooks.12

12 Ibid., p.211.
In 1548 Garcia Descalante Alvarado left an account of the Villalobos expedition in which the Castilians attacked the inhabitants of the Philippine Islands. He likewise observed the simple weapons of the inhabitants.

...February 2, they anchored in a beautiful bay which they called Malaga [Baganga] and the island Cesarea Karoli [Mindanao], "which the pilots, who afterwards sailed around it, declared to have a circuit of three hundred and fifty leagues." After a month's residence on the island, they left in search of the island of Mazagua, but contrary weather forced them to anchor at an island named Sarrangar and by them called Antonio, where they had trouble with the natives, who were attacked by the Castilians under command of Alvarado. The people defended themselves valiantly with "small stones, poles, arrows, and mangrove cudgels as large around as the arm, the ends sharpened and hardened in the fire," but were finally vanquished; they abandoned this island afterwards and went to Mindanao. "Upon capturing this island we found a quantity of porcelain, and some bells which are different from ours, and which they esteem highly in their festivities," besides "perfumes of musk, amber, civet, officinal storax, and aromatic and resinous perfumes. With these they are well supplied, and are accustomed to their use; and they buy these perfumes from Chinese who come to Mindanao and the Philipinas."13

Not only historical records, but also archaeological excavations prove the unreliability of dating a site based upon the presence or absence of iron. The Makabog and San Narciso jar burial sites illustrate this point.14

Unlike other jar burials in the Albay-Sorsogon region,


Makabog and San Narciso are open-air sites. The San Narciso jar burials include the Recudo and Tumagudtud sites. Both contained jar burials in association with iron spear points, glass and paste beads, and fragments of shell or glass bracelets (Figure 9). Makabog contained five burial jars which Solheim describes as "not as interesting as those at San Narciso." He recovered no skeletal remains or iron tools, but found a few glass beads, stone tools and small, poorly baked, double angled pots (Figure 10). Solheim claims that:

...In many ways it [Makabog] is quite similar to the burial-jar sites in San Narciso, Tayabas which contained a few iron tools. The same type of beads were found at both locations, and though not common, angle pots and perforated, applique, ring stands were also found at San Narciso. The shape of the burial-jars themselves was very similar in both sites, as the shape of the limestone covers.

The various combinations of associated artifacts: Neolithic tools with Iron Age glass beads or Iron Age tools and glass beads suggest a continuous and overlapping use of material goods as Pigafetta also witnessed. Once new goods entered the culture, they became part of an existing jar burial assemblage. This ever expanding repertoire of material goods explains how both a fourth and a fifteenth century jar burial could contain similar funerary goods. With the continuous use of both old and new material goods, absolute dating

16 Though Solheim recovered no skeletal remains, he assumes that the "buried jars" are burial jars because he also unearthed associated artifacts which archaeologists identify as funerary goods in the Philippines.  
17 Ibid., p.65.
becomes impossible. Neither the iron tools nor the glass beads date the San Narciso or Makabog jar burials. Rather they only establish a relative time framework before which the inhabitants could not have performed jar burials. For San Narciso and Makabog this would mean that the jar burial sites could date anywhere from the second to the seventeenth century. It is even possible that Makabog postdates San Narciso though Solheim assumes that the sites are contemporaneous because both contain glass beads. As Garcia Descalante Alvardo aptly noted, certain inhabitants of the Philippines followed a Neolithic way of life well into the sixteenth century.

II.3. Other Asian Jar Burials

A. South Korea

While the jar burial tradition presents a cultural continuum in the Philippines from the Late Neolithic to the present, elsewhere in Asia the burial form is a short lived phenomenon from c.400 B.C.-c.A.D.200. In south Korea Jeong-Hak Kim notes three major jar burial sites: the Hoehyal shellmound, Kimhae; Nangmin-dong site, Tongnae; and Sinch'ang-ni site, Kwangsan gun (Map 2). From 1934-1945 Tojin Kayamoto excavated the Kimhae shell mound.\(^{18}\) He discovered several types of burials: dolmens, stone cist coffins, and jar burials. Kim

describes the three jar burials as having "the shape of an egg cut in half, with a wide mouth and small flat bottom." From Burial No.3 archaeologists recovered three pipe-shaped pieces of dark nephrite, two bronze daggers and eight bronze planing tools. The bronze implements date to the Spring and Autumn Annals period which suggests that the jar burials could not be earlier than the fourth century B.C. At Nangmin-dong construction workers accidentally exposed another jar burial site which contained four jars. Two joined jars were recovered of which one was painted red and polished. Among the broken fragments of the other three jars, archaeologists unearthed a glass shaped ornament and an iron ring. The Singch'ang-ni site represents the first major concentration of south Korean jar burials. Kim Won-Yong estimates the original burial ground exceeded 50 meters square with 53 burial jars unearthed in the excavated area. The jars contained no skeletal remains and only a few associated artifacts. Kim describes the Singch'ang-ni jars as similar to a Nangmin-dong jar with pairs of handles placed near the middle of the vessels. He dates both Nangmin-dong and Sinch'ang-ni to A.D. second and third century.

20 Jeong-Hak Kim, op. cit., p.111.
21 Kaneko, op. cit., p.11.
B. Japan

A close parallel to the Korean jar burials is found across the Korean Straits in north Kyushu. Kaneko even contends that the nuclear area for Yayoi jar burials "should accordingly be redefined as south Korea and north Kyushu."\(^{22}\) To justify this statement he compares the relevant archaeological data from both south Korea and north Kyushu.

In south Korea, burial jars of both the single and the combined variety have been found. Single jars are frequently provided with stone covers. An east orientation is reported for the Kimhae Kyong-sang Nam-do jar burial, but in general, orientation does not appear to be consistent. In type the Kimhae burial jars closely resemble the large, combined, bulbous variety of north Kyushu.... The jars are described as having 'the shape of an egg cut in half, with a wide mouth and small flat bottom' ..., a description equally applicable to many Kyushu specimens. At the same level, but separated from the jar burials by a row of stones, were found five small, rectangular, stone-lined pits.... Since Kimhae and four burial jar units at Tongnae, Kyongsang Nam-do were until recently the only well-known jar burial sites in south Korea, many Japanese archaeologists believed that their existence owed to a reciprocal influence from Japan, an opinion also found in Kidder.... Alternatively they were attributed to the influence of the Chinese Han period jar burials with Lolang as intermediary. Indeed, the north Korean jar burials (predominantly from the Pyongyang area) are reported to show affinities in form and texture with Han pottery. These jars are of a hard, greyish ware with mat impressions .... They are different from south Korean jars, which belong to the plain, coarse pottery context from which the whole Yayoi horizon is said to have developed....\(^{23}\)

\(^{22}\) Ibid., p.10.
\(^{23}\) Ibid., p.10.
In the nuclear area archaeologists have recovered numerous Yayoi jar burials in round or elliptical pits or under dolmens or cairns (Figure 11). The burial jar unit often consisted of two large earthenware jars joined mouth to mouth and sealed by a clay ribbon with either or both of the upper and lower jars intentionally perforated. In the case of single burial jars the archaeological evidence indicates that the jars were originally sealed with a stone or wooden cover. Stone covered jars became more frequently used in the later phase and were sometimes found deposited with the mouth upside down. Archaeologists unearthed burial jars which rested anywhere from a horizontal position to a $45^\circ$ angle. Mori claims that the Yayoi first performed horizontal and later angled jar burials. Kidder echoes this opinion and believes that the changing angle reflects practical considerations.

In dealing with the chronology of the double jars the trial and error experiences of those practising this method become quite vivid. The horizontal ones have suffered the most from the pressure of the earth, partly because as the earliest they are deeper, but also it was discovered that burial at an angle made them more prone to withstand the weight, so therefore in rough but accurate enough terms early ones are usually horizontal, those of the middle stages are slanted $30^\circ$ or thereabouts, and the latest are laid at $45^\circ$ or more.\(^{24}\)

Other methods of dating the Yayoi jar burials include funerary goods and pottery forms. Though the earliest burial jars preceded the potter's wheel, the

Yayoi still produced jars large enough to contain an adult body in either a flexed or extended position. With the introduction of the potter's wheel, the jars became standardized and mass produced. Mori describes the simple beauty and strength of the jars with their especially strong mouth rims and bulged lower bodies to increase stability. He suggests that perhaps the potting improvements and size increases reflect specialization of the craft form.

Unlike the pottery of the previous stage, which appears to be made from household industry, the pottery of this stage must have been made by special artists with high technical skill. A division of labor must have existed, which is not recognizable in the production of earlier pottery.25

Later Yayoi burial jars exhibit a gradual degeneration in quality. The jars return to the Early Yayoi coarseness, and the shape becomes less elegant. Kidder questions whether the trend toward crudity marks the arrival of other burial forms to which the better artisans gravitated.

Not only Yayoi burial jars, but also the associated burial goods prove useful time markers. Though most burial jars contained few artifacts, Mori notes a chronological progression of various material goods. The earlier jars contained Chinese bronze spears and daggers, and bronze ge halberds. The middle phase witnessed the

introduction of Eastern Han bronze mirrors and the continued presence of bronze weapons. Also the Yayoi began to produce a local ge and mass produce stone axes and knives. The later burial jars rarely contained burial goods though archaeologists occasionally recovered iron weapons and tools which Mori claims helped to replace jar burials with wooden coffins.

...The scarcity of later burials is considered to bespeak the appearance of iron tools and weapons, which would help replacement of jars with wooden-coffins. The later burials have no associated objects, because it is supposed that the upper classes have come to bury their dead in cist-graves and the tumulus age has begun after the fashion of "Yamato" culture.26

The origin of the Yayoi jar burial tradition remains an enigma. The archaeological record offers no historical or cultural precedent in south Korea-north Kyushu for the development of a double jar burial for adults and children. Mori supposes that the Yayoi jar burials originated in the Jomon single jar burials for infants, but Kaneko dismisses any such possibility. He contends:

Looking at jar burials in a Japan-wide context, it should be noted that pottery receptacles for embryonic or infantile remains were already in use in Jomon times, and became fairly numerous in the late and latest phases. These receptacles are ordinary household ware; where a cover is used at all, no effort to effect a fit can be detected. To date there is no evidence of a genetic relation between them and the Yayoi jar burials, at least within Japan.27

Both Mori and Kaneko consider a Chinese origin for the

26 Ibid., p.233.
27 Kaneko, op. cit., p.7.
Yayoi jar burials. Mori notes that the stone knives and other agricultural stone tools that are associated with the Yayoi culture are closely related to North China through Korea. Kaneko claims that "the idea and practice of jar burial into our nuclear area from somewhere in China is not to be doubted, although we are in the dark about the details." As to how the idea reached north Kyushu, he considers several possibilities. He accepts the important role played by the Han who poured its economic, political and cultural wealth in Lelang (108 B.C.-A.D. 313). As a center for Chinese residents in Korea, Lelang developed its own culture which greatly influenced the culture of native Koreans. Kaneko also contends that "the possibility of another source should be seriously considered and thoroughly investigated." In particular he suggests the region occupied by the 54 Mahan tribes and later the Kingdom of Paekche (18 B.C.-A.D. 660). Located in the strategic Han River valley, the Paekche had a highly developed culture which had been influenced by its contacts with the Chinese colonies of Lelang and Daifang. Kaneko also considers the opinions of other scholars (e.g. Solheim) who contend that the jar burial tradition spread in association with rice cultivation. Though Kim believes that "it is premature to express an opinion about an exclusively northern or exclusively southern introduction of rice

28 Ibid., p.11.
29 Ibid., p.11.
into Korea", he suggests that southern Paekche and the lower reaches of the Yongsan River "as one possible point of impact." The historical records indicate that this region experienced frequent seaborne contact with South China, and the Samguk Sagi for the years A.D. 33 and 242 mentions this area as suitable for rice growing. So far archaeologists have recovered rice grains from only level VII-b of Kimhae shellmound. These grains have been identified as Oryza sativa which is also found in the Yayoi period in Japan.

Other close parallels link south Korea and north Kyushu. The texture and form of the burial jars are similar. Jeong-Hak Kim even suggests "Karak-ni ceramics might be the origin of Yayoi ceramics." The earliest Yayoi pottery of Japan, Itatsuke I of Kyushu has two basic shapes: the deep jar and the short constricted neck form. Both these forms are common to south Korean ceramics. Furthermore the north Kyushu wares which preceded the Yayoi had no short necks. This suggests that the Yayoi imported this form. Also the small unstable base and lip incision of the north Kyushu jars recall similar Karak-ni vessels. While the south Korean and north Kyushu burial jars have elements in common, both are unrelated to north Korean forms. Rather north Korean burial jars show close affinities with Han pottery. They are both hard greyish wares with mat

30 Ibid., p.12.
31 Ibid., p.12.
32 Jeong-Hak Kim, op. cit., p.93.
impressions while the south Korean jars belong to a plain coarse pottery tradition from which the whole Yayoi horizon developed.

While Kaneko has no doubt that the jar burial tradition originally emanated from the Neolithic burial practices of North China, he speculates whether the tradition entered south Korea-north Kyushu from a northern and eastward expansion or a seaborne spread across the Yellow Sea from the Shandong or Jiangsu provinces.

...An ultimate association of the jar burial idea with the nuclear neolithic traditions of North China seem fairly assured, but we can only speculate about whether our nuclear area received it via a primary northern and eastern expansion, or in the course of a secondary, seaborne, northward spread from South China. The evidence at hand favours the second alternative. Although an island stepping-stone advance via the Ryukyu Islands is a theoretical possibility, the cultural inventory from these islands still lacks positive evidence and suggests that the Ryukyus have always been rather marginal to all neighbouring centres of cultural activity. Direct contact between South China and Kyushu (as suggested for late Jomon and the Lungshanoid horizon of South China by Kokubu Naoichi ... and a subsequent spread into south Korea is feasible, but other evidence goes against this theory.33

Direct contact between coastal China and Kyushu and then a northward spread into south Korea is unlikely for the following reasons (Map 3):

1- The Yayoi sites on Kyushu, while accessible to the peninsula, are not obvious landing points from South China.

2- Specifically Korean elements (e.g. southwest

33 Kaneko, op. cit., p.13.
Korean triangular stone knives, Manchurian-Korean mirrors and weapons) are associated with Yayoi jar burials.

3. The marked differences between the north Korean burial jars and those from south Korea-north Kyushu do not support a northern and eastward expansion. For these reasons Kaneko favors "southwest Korea as the most likely area of contact with the south at this stage."34

3. Vietnam

Not only Japan but also Vietnam experienced the sudden appearance of jar burials c.fourth century B.C. A Metal Age phenomenon the Sa-huỳnh jar burial culture is concentrated in the Dong Nai river basin and along coastal Vietnam. Sa-huỳnh itself is a necropolis and not a habitation site.35 It is located not in Sa-huỳnh proper, but in a nearby area called Long Thanh. Colani describes the area:

Dans la province de Quang-ngai, à Sa-huỳnh, la bordure de dunes atteint jusqu'à 19 mètres de hauteur. Elle est située entre une baie et la mer. Au Sud, une petit massif rocheux, côte 93. A l'ouest, en bas l'eau tranquille du golfe; au fond la sombre chaîne annamitique. A l'est la mer lumineuse, tantôt jolie, scintillante, tantôt foncée tragique, courrouçée, menaçante. Sous nos pieds, le sable, composé en majeure partie de grains de quartz, brille sous la douce caresse des rayons du soleil.36

34 Ibid., p.13.
Here in 1923 Mme. Labarre, wife of the regional tax collector, discovered 120 jars buried in the sand dunes with no evidence of a tomb structure (Figures 12, 13). In 1934 Colani excavated another 55 jars and five years later Janse unearthed 30 more. Parmentier remarked that the site was constantly disturbed by children and adults who scoured the dunes for carnelian beads. When he arrived in 1923 he noted that the jars:

...sont rangées sans ordre et à des hauteurs irrégulières, mais jamais en étages superposés; parfois espacées, parfois jointives, mais non de même niveau, comme si de nouvelles pièces étaient venues tardivement se placer entre les anciennes. Leur formes sont simples, en terrine ou profondes; celles-ci en plus grand nombre; leur contenu était généralement protégé par un couvercle d'aspect très spécial, un peu comme un énorme pot à fleurs renversé au-dessus de l'ouverture. L'orifice lui-même parfois à fleur du sol, ne descend guère à plus de 0 m.50 de profondeur. Il n'est pas impossible d'ailleurs, que l'état des lieux ait changé depuis l'installation de ces dépôts: la dune est assez basse au-dessus de la mer, 2 m.50 à 3 mètres; elle peut très bien avoir eu autrefois une hauteur plus forte et avoir été dérasée par quelque tempête.37

Parmentier indicates that the burial jars had lids which he describes as inverted flower pots (Figure 13-A). Colani contends that these trunconical vessels with rather elegant geometric designs are not lids but rather separate repositories for human bones.38 Inside the burial jars the archaeologists recovered the following array of burial goods:

37 Parmentier, op. cit., p.326.
38 I derived the word trunconical from the French word trunconique which aptly describes a cone whose apex has been cut off by a single plane. This avoids the constant repetition of the phrase: a vessel in the shape of a truncated cone.
...une ou deux marmites noires, une ou deux coupes, un objet bizarre que nous appelons lampe, un outil en fer, souvent un peson de fuseau, des objets de parure, perles en verroterie, cornalines percées, pendants et anneaux d'oreilles, en pierre dure ou en verre, parfois un objet ou des grelots de bronze, souvent des débris d'os humains.\textsuperscript{39}

Though Sa-huỳnh has been described as a jar burial site, recent excavations by Vietnamese archaeologists indicate that the area was not just a necropolis. In 1976 Trai and Duong excavated a trench only five kilometers from Sa-huỳnh harbor.\textsuperscript{40} They found a large jar in association with over 2,000 sherds, 54 stones and pebbles, bull tooth axes, two hoes, one rice pounder, three net sinkers, one pottery stove and animal bones. Both Trai and Duong claim that the sherds come from cooking pots and the animal bones and ashes suggest meal preparation in the area. The large jar measures 82.3 centimeters tall without the neck and 69.2 centimeters in diameter. The bottom of the jar has a hole 10-15 centimeters in width over which the archaeologists believe lay a clay cover. Inside the jar they found earthenware pots and four clay lids with broken top knobs. These lids had complicated decorations and when turned over they looked like large plates. Other pottery forms included four decorated vases with traces of red and greyish-black color; one oval pot; two high based bowls; three small pots and on the bottom three pebbles and one stone hoe. No radiocarbon dates come from this

\textsuperscript{39} Ibid., p.326.
\textsuperscript{40} Nguyen thanh Trai and Trinh Duong, "Tro lai Sa-huỳnh (Nghi Binh)," Khoa co hoc 4 (1977): 58-60.
site nor from any other site in the Sa-huỳnh region.

Another recently excavated Sa-huỳnh site lies two kilometers from Tam Ky at Tam My (Quang Nam).\textsuperscript{41} Like the Sa-huỳnh type site, Tam My appears to be only a necropolis with over 46 burial jars so far unearthed (Figure 14). The sand-tempered clay jars are reddish-brown and brownish-black in color. They vary in height from 50-80 centimeters and conform to two basic styles: 1- a jar with a wide mouth, 2- a jar with an edge inside the mouth to support a cover. The archaeologists assume that these lids originally covered all jars, but they eventually crumbled and fell inside. Most lids recall the trunconical Sa-huỳnh vessels which Parmentier describes as inverted flower pots, and only one was bowl shaped. The jars contained mostly broken pottery though archaeologists also recovered footed vessels; small pots; spindle whorls; oxidized iron artifacts; a bronze object; crystal and gold beads inside a small jar; leech-shaped earrings; a double-headed beast earring; and a lugged earring. At Tam My the archaeologists believe that each burial jar contained one burial though they have no evidence as to whether the inhabitants cremated the dead or whether the burials were only for children. In fact the report makes no mention of any human remains whatsoever.

Moving farther south cultural vestiges of the Sa-huỳnh culture exist in the Dong Nai area. The three

\textsuperscript{41} Trinh Can and Pham van Kinh, "Khaiquat khu mo chum Tam My, (Quang Nam-Da Nang) Khoa co hoc 4 (1977): 49-57.
major sites are Hang Gon, Dau Giay and Phu Hoa. Of particular interest are the Hang Gon 9 and Phu Hoa sites for which radiocarbon dates exist. Hang Gon is located on a spur of red basaltic land at the confluence of two rivers: Suoi Ram and Suoi Sau; 50 kilometers east northeast of Saigon.\textsuperscript{42} Saurin subdivides the Hang Gon excavation into ten different sites, and describes only Hang Gon 9 as a jar burial field. Archaeologists unearthed approximately 60 jars with covers in the form of flat plates or inverted vases (Figure 15-1, 2, 3). The burial jars measured 40-60 centimeters tall and 40 centimeters in diameter. Basically they divide into three types: 1- carinated jars with no decoration; 2- ovoid jars; 3- bell mouthed jars. The majority fall within this latter category and are decorated with clay spirals. Both inside and outside, a reddish-brown clay slip covers the jars and simple designs often decorate the vessels. The most common pattern is the double spiral outlined and framed with cross hatchings and delimited by two lines 3-4 centimeters apart. The earthenware burial jars contained charcoal; sherds of intentionally broken pots; iron chisels; glass and hard stone beads (carnelian, agate and zircon); a golden pendant, a zoomorphic earring and a bronze earring. Against one of the jars lay an iron sword while near other jars the inhabitants placed small unbroken pots.

sometimes one inside the other. Inside the burial jars archaeologists found not only burial goods but also charcoal fragments and nodules of calcified red earth. Saurin contends that these remains suggest a cremation burial even though he found no ashes nor any bone fragments in the jars. He believes that the inhabitants originally separated the cremated remains and placed the ashes in the burial jars and buried the bones elsewhere. Over time the ashes washed away which would explain the empty burial jars. At Hang Gon 9 as well as Dau Giay, Saurin found sherds of a special type of vessel. These vases resemble the lustral water jars used by the Chams to purify the body before cremation. The original color of these jars is grey, but often they assume a rosy hue when placed in contact with fire. As this rosy tint occurs along the breaks, Saurin believes that the inhabitants threw the broken lustral jars into the fire with the deceased.

...Cette observation et la présence de nombreux débris de charbon de bois en dehors et autour des jarres indiquent que celles-ci étaient enterrées en un lieu traditionnel d'incinération, à proximité ou sur l'emplacement même du bûcher dont elles conservaient les cendres.43

Saurin notes the close affinity between Hang Gon 9 and Sa-huynh, and contends that the Hang Gon jar burial field belongs to the Sa-huynh culture:

Les affinités du mobilier des jarres de Hang Gon avec Sa Huynh sont évidentes. Toutefois, les perles de pierre et de verre sont beaucoup plus rares; les perles en pierre brute traduisent un certain archaïsme; on n'a pas

43 Ibid., p.331.
trouvé de poteries peintes. Et Sa Huynh paraît plus évolué, plus récent que Hang Gon; cela concorde avec les datations de Hang Gon et l'âge archéologique attribué à Sa Huynh (aux environs du début de notre ère).44

Saurin obtained three radiocarbon dates of 2300±150 B.P., 2190±150 B.P., and 2100±150 B.P. from the Hang Gon 9 charcoal samples recovered near jars 1 and 2.45 These dates establish not only a relative time framework for the Sa-huynh culture, but also suggest that Hang Gon 9 and Dong-son are contemporaneous. Saurin observed similarities in the decorative motifs between the two regions: the wolf tooth hatching and the double spiral patterns decorate both Hang Gon and Dong-son pottery.

In the vicinity of Hang Gon 9 lies another jar burial site, Dau Giay.46 Though archaeologists have known about Dau Giay for over twenty years, they never have systematically excavated the site. In 1964 residents cleared the area to plant banana trees and discovered sherds and stone objects. Later some earth moving projects unearthed two jars which contained charcoal, bone fragments, and sherds. From the same area they also recovered iron fragments. In 1968 a bulldozer unearthed three more burial jars of which one remained partially intact (Figure 16). Ovoid with a round base

44 Ibid., p.354.
and large lip, the jar measured 65 centimeters high, 55 centimeters in diameter and 30 centimeters in mouth circumference. The jar is reddish-brown and devoid of decoration except for a simple band of wavy and oblique lines below the main body. The other sherds found in and around the jar are similar in composition to the burial jar though two other decorative motifs are apparent: 1- straight lines joining perpendicular cross hatchings 2- a series of inverted S's bordered by cross hatchings banded by two lines. Other unearthed objects include three spindle whorls and one knob for a cover. Saurin contends that the jar fields of Hang Gong 9 and Dau Giay belong to both the Iron Age and the Sa-huỳnh culture.

The jar burial field at Phu Hoa, located three kilometers south of the Xuan Loc province, is also related to the Sa-huỳnh culture. Archaeologists have excavated nearly 40 jars which appear to have been buried without any specific order: some jars are contiguous; others spaced out. Fontaine believes that "elles semblent cependant distribuées en groupes plus ou moins nets correspondant peut-être à une répartition d'après les familles." Despite the extensive damage done to the Phu Hoa site by earthmoving equipment, archaeologists still estimate that the large burial jars measure approximately 50 centimeters tall and 40-80 centimeters in diameter (Figure 17). Several Phu Hoa jars are plain

48 Ibid., p.407.
and those with decoration have designs limited to a 3-5 centimeter band encircling the jar below the belly and sometimes a line denoting the lower limit of the neck. Within the band are two patterns already observed at Dau Giay: 1- sinuous lines incised on a background of oblique lines 2- double spirals formed by a series of inclined S’s.

The contents of the Phu Hoa burial jars vary. Some contain only sherds while others have numerous burial goods which recall the Sa-huỳnh artifacts. They consist of:

**Céramique:**
- des assiettes fréquentes
- des marmites rares
- des vases en forme de champignon assez fréquents
- probablement parfois des fusaioles

Les lampes existent seulement à l’état de petits fragments isolés. Une seule coupe a été recueillie dans les jarres; les autres ont été récoltées à l’extérieur.

**Objets en fer:**
Présence très fréquente d’un ou plusieurs objets (outils, armes ou anneaux).

**Objets en bronze:**
Rares, représentés surtout par des bracelets. Deux grelots ont été trouvés.

**Objets de parure:**
Boucles d’oreille et bracelets assez rares. Perles en cornaline, grenat ou verre, très fréquentes.

**Débris d’os:**
Presqu’absents. De très rares minuscules fragments, carbonisés ou non, ont été remarqués dans trois jarres. En revanche, les fragments de charbon de bois sont communs.49

Fontaine obtained two Phu Hoa radiocarbon dates of 2400±140 B.P. and 2590±290 B.P. from the charcoal fragments in jars 11 and 13 and a sooted pottery fragment from Jar 8. These dates are not only consistent with each other, but also form a coherent pattern with the Hang Gon 9 radiocarbon dates. Together they indicate that the Sa-huynh culture is a Metal Age phenomenon c.400 B.C.-c.A.D. 200.

II.4. List of Philippine Jar Burial Sites in the Early Christian Era and Later

During the Early Christian era the jar burial tradition died out in both Vietnam and Japan, yet continued to spread in the Philippines. Archaeologists have excavated jar burial sites which span nearly 1500 years (Maps 2 and 4). A tentative list of sites is included in Table II.

50 Ibid., p.441.
TABLE II - Philippine Jar Burial Sites c.200 B.C.–c.A.D. 1500

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TYPE</th>
<th>ASSOCIATED ARTIFACTS</th>
<th>DATE Claimed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LUZON</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) 1. Cabarruan</td>
<td>open-air</td>
<td>Chinese tradeware, sherds</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td>Solana, Cagayan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) 2. Arku Cave</td>
<td>cave</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Cagayan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C) 3. Nueva Ecija,</td>
<td>open-air</td>
<td>stone stepped adzes</td>
<td>Late Neolithic</td>
</tr>
<tr>
<td>Carranglan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(D) 4. Balingasay</td>
<td>open-air</td>
<td>Chinese tradeware, shell objects, glass beads, local pottery, spindle whorls, iron</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td>Bolinao</td>
<td></td>
<td>implements e.g. bolos, daggers</td>
<td></td>
</tr>
<tr>
<td>(E) 5. Balincaguin</td>
<td>open-air</td>
<td>Chinese tradeware, Chinese coins</td>
<td>A.D. 11th c.</td>
</tr>
<tr>
<td>Pangasinan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(F) 6. &quot;Hacienda</td>
<td>open-air</td>
<td>Chinese tradeware</td>
<td>A.D. 10th c.–15th c.</td>
</tr>
<tr>
<td>Ramona Site&quot; Porak, Pampanga</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(G) 7. Calubcub Segundo,</td>
<td>open-air</td>
<td>Chinese tradeware, sherds, yellow and translucent glass beads</td>
<td>A.D.15th c.</td>
</tr>
<tr>
<td>San Juan, Batangas</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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<tr>
<td>LUZON (cont.)</td>
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</tr>
<tr>
<td>(H) 8. Tumagudtud, San Narciso</td>
<td>open-air</td>
<td>red paste beads, stone tools, glass beads, shell ornaments, local pottery, iron points</td>
<td>A.D. 200-500</td>
</tr>
<tr>
<td>(I) 9. Recudo, San Narciso</td>
<td>open-air</td>
<td>irons points, glass bracelet(?), paste beads, shell and bone artifacts, iron implements</td>
<td>A.D. 200-500</td>
</tr>
<tr>
<td>(J) 10. San Narciso - 6 other jar burial and midden sites in vicinity</td>
<td>1- cave, 5- open air</td>
<td>shell bracelets, beads, Chinese and Thai tradewares</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td>(K) 11. Mulanay-Bondo, Tayabas</td>
<td>cave</td>
<td>Chinese tradeware ceramics</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td>(L) 12. Libmanan</td>
<td>shell-midden</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>(M) 13. Pilar Sorsogon</td>
<td>?</td>
<td>glass and paste beads, iron implements, cloth</td>
<td>A.D. 300-800</td>
</tr>
<tr>
<td>(N) 14. Bato Caves, Sorsogon</td>
<td>cave</td>
<td>shale and shell beads, stone tools, shell ornaments and spoons, local pottery</td>
<td>2050±50 B.P.</td>
</tr>
<tr>
<td>(O) 15. &quot;Little Tigkiw Site&quot;, Escuala, Casiguran, Sorsogon</td>
<td>open-air</td>
<td>glass beads, iron implements</td>
<td>200 B.C.- A.D. 200</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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<tr>
<td>CAGRARAY ISLAND</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(P) 1. Mataas Sites (12 sites)</td>
<td>1- stone tool - jar burial assemblages e.g. shell bracelets, stone implements, shale and shell beads, shell spoons.</td>
<td>A.D. 1st c.-3rd c.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2- Chinese tradeware assemblages e.g. glass beads, shell bracelets, iron blades, local pottery</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td></td>
<td>(Q) 2. Misibis - Kagbulakaw Area</td>
<td>shell and shale beads, shell spoons, stone implements and ornaments</td>
<td>A.D. 1st c.-3rd c.</td>
</tr>
<tr>
<td>BATAN ISLAND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(R) 1. Minarosa Cave</td>
<td>Ming porcelain sherds, agate bead, copper ring</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td>MINDORO IS.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(S) 1. Pokanin</td>
<td>local pottery</td>
<td>A.D. 1st c.-3rd c.</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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<tr>
<td>MARINDUQUE IS.</td>
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</tr>
<tr>
<td>(T) 1.  S.W. of Boak</td>
<td>cave</td>
<td>&quot;rough earthenware&quot; and semi-stone ware</td>
<td>A.D. 1st c.-3rd c.</td>
</tr>
<tr>
<td>(U) 2.  Islet of Tres Reyes</td>
<td>cave</td>
<td>fragments of wooden coffins, shell bracelets, and rings</td>
<td>A.D. 15th c.(?)--16th c.</td>
</tr>
<tr>
<td>(V) 3.  ?</td>
<td>open-air</td>
<td>tall bottle with gold ornaments inside, carnelian beads</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td>(W) 4.  Santa Cruz &quot;Bathala Cave&quot;</td>
<td>cave</td>
<td>jars, dishes, fragments of wooden coffins</td>
<td>A.D. 15th c.(?)</td>
</tr>
<tr>
<td>(X) 5.  Pamine-Taan Cave near Santa Cruz</td>
<td>cave</td>
<td>coffins, 5 types of gold ornaments, 3 types of shell and tortoise bracelets, iron blade, hardwood spear</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td>(Y) 6.  Gasan</td>
<td>open-air</td>
<td>small vases, beads, bronze rings, gold ornaments</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td>(Z) 7.  Balakassa</td>
<td>?</td>
<td>10 skulls</td>
<td>?</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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</tr>
<tr>
<td><strong>MASBATE IS.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(aa) 1. Makabog Cave</td>
<td>cave</td>
<td>local pottery, glass and paste beads, stone pottery anvil, stone tools</td>
<td>A.D. 200-500</td>
</tr>
<tr>
<td>(bb) 2. Kalanay Cave</td>
<td>cave</td>
<td>local pottery, iron implements, stone pottery anvils, stone beads, glass bead, tektite, bronze bell, shell ornaments(?)</td>
<td>A.D. 200-500</td>
</tr>
<tr>
<td>(cc) 3. &quot;extreme northwest tip of the Island&quot;</td>
<td>?</td>
<td>other objects (?)</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td><strong>SAMAR IS.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(dd) 1. Wright</td>
<td>open-air</td>
<td>beads, gold ornaments, iron knives</td>
<td>A.D. 15th c.(?)</td>
</tr>
<tr>
<td>(ee) 2. Egid</td>
<td>open-air</td>
<td>iron implements, paste beads</td>
<td>?</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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<tr>
<td>PANAY</td>
<td></td>
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</tr>
<tr>
<td>(ff) 1. Pispi, Antique</td>
<td>open-air</td>
<td>red slipped earthenware bowl, Chinese and Thai tradeware sherds, locally produced earthenware sherds</td>
<td>A.D. 14th c.</td>
</tr>
<tr>
<td>(gg) 2. Malandog, Antique</td>
<td>open-air</td>
<td>Chinese tradeware and locally produced earthenware sherds, pair of shell bracelets</td>
<td>A.D. 14th c.</td>
</tr>
<tr>
<td>(hh) 3. Tigawon, Antique</td>
<td>cave</td>
<td>Chinese tradeware and locally produced earthenware sherds, two broken section of a bailer shell</td>
<td>A.D. 15th c.</td>
</tr>
<tr>
<td>(ii) 4. Malongong, Antique</td>
<td>open-air</td>
<td>Chinese tradeware and locally produced earthenware sherds, a carnelian bead</td>
<td>A.D. 13th c.-14th c.</td>
</tr>
<tr>
<td>(jj) 5. Bagong Bayan, Buruanga</td>
<td>open-air</td>
<td>Chinese tradeware sherds, iron spear point or dagger</td>
<td>A.D. 14th c.</td>
</tr>
<tr>
<td>NEGRO IS.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(kk) 1. Magsuhot</td>
<td>open-air</td>
<td>iron implements, paste beads, local pottery, antler fragments</td>
<td>&quot;Early Iron Age Culture&quot;</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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</tr>
<tr>
<td>NEGRO IS. cont.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11) 2. Tabon near Vallehermosa</td>
<td>?</td>
<td>Chinese tradeware, local pottery, iron and copper or bronze objects, gold ornaments, shell bracelets (?)</td>
<td>A.D. 12th c.</td>
</tr>
</tbody>
</table>

<p>| MINDANAO IS. | | | |
| (mm) 1. Dapitan-Dipolog &quot;Cataluñgan&quot; | cave | stone, shell and tortoise bracelets, gold ornaments | ? |
| (nn) 2. Dapitan-Dipolog &quot;Duhinot&quot; | cave | beads | A.D. 15th c. |
| (pp) 4. Sindañgan Bay | cave | Chinese tradewares, shell ornaments, iron weapons and tools, beads | A.D. 14th c.-16th c. |
| (qq) 5. Siminoho Rock Shelter, Kulaman Plateau, Cotabato | cave | iron fragments, stone tools, local pottery, carnelian bead, shell and iron bracelets | A.D. 18th c.(?) |</p>
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TYPE</th>
<th>ASSOCIATED ARTIFACTS</th>
<th>DATE CLAIMED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINDANAO IS. cont.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(rr) 6. Asin Cave Davao</td>
<td>cave</td>
<td>local pottery</td>
<td>?</td>
</tr>
<tr>
<td>BASILIAN IS.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ss) 1. N.W. side of Island</td>
<td>open-air</td>
<td>bronze gong or drum cover, beads and other ornaments</td>
<td>A.D. 15th c.-16th c.</td>
</tr>
<tr>
<td>(tt) 2. Bohelebun</td>
<td>midden</td>
<td>bronze gong cover, Chinese tradeware, bronze bells, copper rings, Chinese money, glass, stone and metal beads</td>
<td>A.D. 16th c.-17th c.</td>
</tr>
<tr>
<td>PALAWAN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(uu) 1. Chamber B Manunggul Cave</td>
<td>cave</td>
<td>local pottery, glass, jade, carnelian, onyx, shale and shell beads, glass bracelets, Chambered Nautilus shell spoons, round pebbles (polishing tools (?)), pebble hammers, iron fragments</td>
<td>2140±100 B.P.</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
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<tr>
<td>PALAWAN cont.</td>
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</tr>
<tr>
<td>(vv) 2. Batu Puti Cave</td>
<td>cave</td>
<td>local pottery, glass and shell beads, glass bracelets, Chambered Nautilus shell spoons, socketed adze mould</td>
<td>100 B.C.- A.D. 100</td>
</tr>
<tr>
<td>(ww) 3. Uyaw Cave</td>
<td>cave</td>
<td>local pottery, jade lingling-o ear ornaments, jade bracelets, beads and stud-like objects, glass beads and bracelet fragments, shell beads, clay ear pendant, stone tools, bronze tools</td>
<td>500(?) B.C.- 200 B.C.</td>
</tr>
<tr>
<td>(xx) 4. Duyong Cave</td>
<td>cave</td>
<td>local pottery, jade lingling-o ear ornaments, jade bracelets, beads and stud-like objects, shell beads and one shell bracelet, stone tools, bronze tools, iron(?), socketed adze mould</td>
<td>500(?) B.C.- 200 B.C.</td>
</tr>
<tr>
<td>(yy) 5. Rito-Fabian Cave</td>
<td>cave</td>
<td>jade, shell and glass lingling-o ear ornaments, glass and carnelian beads, iron, bronze and copper fragments</td>
<td>100 B.C.- A.D.100</td>
</tr>
<tr>
<td>(zz) 6. Guri Cave</td>
<td>cave</td>
<td>local pottery, jade, glass and gold beads, bronze fragments</td>
<td>500(?) B.C.- 200 B.C.</td>
</tr>
<tr>
<td>LOCATION</td>
<td>TYPE</td>
<td>ASSOCIATED ARTIFACTS</td>
<td>DATE CLAIMED</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>PALAWAN cont.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(aaa) 7. Pagayona Cave</td>
<td>cave</td>
<td>local pottery, clay ear pendant, shell, carnelian and glass beads, Chambered Nautilus shell spoon, iron and bronze fragments</td>
<td>200 B.C.– A.D. 200</td>
</tr>
<tr>
<td>(bbb) 8. Tadyaw Cave</td>
<td>cave</td>
<td>local pottery, jade, glass, carnelian and gold beads, jade bracelets, shell bracelets and ear pendants, iron, bronze and copper fragments, shell scoops</td>
<td>100 B.C.– A.D. 300</td>
</tr>
<tr>
<td>(ccc) 9. Tabon Cave</td>
<td>cave</td>
<td>local pottery, stone lingling-o ear ornaments, glass beads, bracelet and ornament(?), jade beads, bronze fragment</td>
<td>500(?) B.C.– 200 B.C.</td>
</tr>
</tbody>
</table>


(F) Ibid., p.226.


(I) Ibid., pp.71-72.

(J) Beyer, op. cit., p.252.

(K) Ibid., p.365.

(L) Ibid., p.255.

(M) Ibid., p.256.


Ibid., pp.57-68.

Ibid., pp.65-66.


Ibid., p.257.

Ibid., p.257.

Ibid., p.257.

Ibid., p.257.

Ibid., p.258.

Ibid., p.259.

Ibid., p.259.


Ibid., p.268.

Ibid., p.268-269.


Ibid., p.268.

Ibid., p.269.

Ibid., pp.269-270.

Ibid., p.272.


(mm) Ibid., p. 320.

(nn) Ibid., p. 321.

(oo) Ibid., p. 322.

(pp) Ibid., p. 323.


(tt) Ibid., p. 325.


(vv) Ibid., p. 118.

(ww) Ibid., p. 119-145.

(xx) Ibid., p. 119-145.

(yy) Ibid., p. 123.

(zz) Ibid., p. 124.

(aaa) Ibid., pp. 145-151.

(bbb) Ibid., pp. 151-156.

(ccc) Ibid., pp. 69, 127, 135.

1. Babuyan Islands

From the Philippines the jar burial tradition moved both north and south. Archaeologists have excavated jar burials in the Babuyan and Batanes islands as well as Botel Tobago (Map 4). The Babuyan Islands consist of five small islands, namely; Camiguin, Dalupiri, Fuga, Calayan and Babuyan Claro. Fuga is the closest to Luzon and can be seen from Taggat, Ilocos Norte. In turn Dalupiri and Camiguin are visible from Fuga; and Calayan from Dalupiri. The physical setting for the jar burials is similar on all five islands. In 1937 Bartlett carefully noted the geographical location of the Dalupiri burials. On the eastern side of the island, elevated coral had been weathered with clefts, fissures and crevasses opening laterally into a ravine or directly into the sea cliffs. At a high point on the edge of a sea cliff, Bartlett observed stone cairns which contained jar burials (Figure 18). Though Bartlett never reached the highest point on the island, the inhabitants told him this area was literally covered with graves.

...Each consisted of a circular enclosure from eight to fifteen feet in diameter, the wall being of rough coral rock, laid without any

great care in fitting and without mortar, and originally about four feet high.... In the center the jar was sunk about to the rim in the earth.... At the time of burial a second inverted jar of the same sort fitted outside the rim of the lower one, so that the two formed a coffin sufficiently large to take a body in a squatting position if the knees were doubled up under the chin. Radiating toward the overlap of the jars, and actually touching them, were several large heavy stones, between and over which were tightly chinked many small stones, forming a pavement at the center of which the upper inverted jar must have been exposed. This, being unprotected, has, in every example seen, been broken by stones being thrown upon it. The lower jars, even if cracked, are quite likely to be sufficiently intact to hold rain water, and to be filled with a black, fetid, decomposing mass of extraneous organic matter and soil. The odor is largely that of hydrogen sulphide, and is contributed to by small dead animals such as crabs and snails. (The hermit crabs that live in borrowed sea shells climb up from the shore and may be found, alive and very active, almost anywhere). Bones have been almost entirely dissolved by the rain water and organic acids from the humus. From the one jar that I excavated (it had already been rifled) every bit of heavy material was examined after washing out the black mud by suspension and decantation. I recovered only a few unrecognizable fragments of rotten bone.52

There were no beads or other artifacts whatsoever in the jar, except fragments of the upper jar.53 The absence of burial goods suggests that either robbers had plundered the site or the inhabitants stripped the body before interment.

Reference to other Babuyan Island jar burial sites appear in an earlier account by Merton Miller who in 1911 investigated the burial mounds on the volcano at the southeastern point of Camiguin Island.54 Miller noted

52 Ibid., pp.9-10.
53 Ibid., p.10.
54 Ibid., p.1.
that on the southwestern slope there were bare spots
10–20 hectares in area with fumaroles or openings in the
earth through which volcanic steam escaped. Near these
openings he found burial mounds which contained two kinds
of jars: 1—those large enough to contain an adult body
in a squatting position 2—others only large enough to
hold bones. The larger jars measured 80 centimeters tall
and 60 centimeters in diameter; the smaller ones 20
centimeters in height and diameter. He assumed that the
inhabitants used the smaller receptacles as bone
repositories because the diameter of the mouth was less
than 15 centimeters—in his opinion too small to contain
an unbroken skull or a child's body.

Another later account of the burial mounds on
Camiguin Island describes three ridges running down the
slope enveloped in steam.55 When the wind blew the
steam away, these ridges stood covered with stone cairns:
large ones on the two outer ridges and smaller ones in
between. Captain Burdett rightly concluded that he had
found an ancient burial ground. He assumed that one
ridge contained male burials; the other female and the
middle ridge children. He based this assumption on the
fact that the eastern ridge contained big urns; the
western ridge contained smaller ones and the center ridge
"only little wee urns...."56 Masses of almost solid
sulphur covered some of the cairns. Burdett opened one
of them and found that "the large urns and the bodies

55 Ibid., pp.2–5.
56 Ibid., p.4.
they had contained had been displaced by pure crystalline sulphur in its most beautiful form...."57 From here Burdett continued to explore Camiguin and found it covered with crater holes. Either in every hole or nearby were literally scores of cairns, "while high up above the volcanoes slumbering below were great grave yards of thousands of cairns."58 The association of thousands of jar burials with a high location recalls Bartlett's later report about the cairn fields literally covering the highest point on the island. Of further interest is Captain Burdett's discussion of Limahong's visit to Camiguin. Local tradition claims that Limahong, a Chinese pirate, got sulphur for making gunpowder at Camiguin. Supposedly he made Ibo, on the westward side of Calayan his base. From there he sent junks that risked fierce rip tides to collect sulphur and saltpeter. They returned to Calayan where he made gunpowder and stink pots for attacks on Luzon.

Jar burials are not well documented for Fuga Island. An informative 1912 travel guide to Luzon mentions that the island had jar burials.59 Forty years later Wilhelm Solheim explored Fuga and excavated three jar burial sites.60 One site located 300-400 meters from the coast contained several scattered jars. Unlike Camaguin and

57 Ibid., p.3.
58 Ibid., p.4.
59 Ibid., p.5.
Dalupiri, no mounds or cairns were evident. Rather the earthenware jars were placed in shallow holes enlarged in the solid fragmentary coral ground. All three sites contained similar burial jars. They varied in color from tan to dark brown with surface fire clouds. Small circular impressions on the inner surface suggest that the potter used an anvil, and small flattened surfaces and straight lines on the outside suppose the use of a smooth paddle. Solheim states that the jars divide into two basic types: 1- jars large enough for an adult primary burial 2- jars which could contain only secondary burials. Simple earthenware bowls or jars essentially the same shape as the bottom jar served as lids. The associated artifacts were few and simple and included: metal fragments, a shell disk, animal bones, bronze rings, and beads.

One site on the eastern end of Fuga contrasts with the other two burial areas. Here Solheim found jar burials placed in coral cairns 1-2 meters high (Figure 19-a). These jars were not earthenware, but rather glazed stoneware with earthenware lids. The accompanying grave goods were simple artifacts: two small worked stones and a worked shell. Solheim mentions that the inhabitants had explored this site and he found no undisturbed jars.

2. Batanes Islands

Roughly half way between the Babuyan Islands and Taiwan lie the Batanes Islands of which Batan, Sabtang
and Itbayat form the major islands. Sabtang is only a few miles away from Batan, and on a clear day Itbayat supposedly is visible from Batan. Beyer claims that the jar burial culture on Batan was first discovered and explored by Pio Montenegro in 1931-1935. Montenegro unearthed several large burial jars at Itbud to the southeast of Ivana. Later he excavated five other sites of which two produced burial jars interred in mounds known as pada-paday.

The jar containing the body was usually first put into an excavation—sufficiently deep so that the top of the cover was seldom much above the ground level—and then the hole was filled in and covered with an earthen mound of some size (in the Babuyan Islands being still further covered with a stone cairn). In most of the jars found the bones were already wholly disintegrated, but in a few cases the teeth and some sizable bone-fragments still remained. The jars are all made of a thick half-baked hard pottery or a medium-soft stoneware, doubtless of local manufacture. They rarely contain ornaments or other durable objects besides the body itself, though occasionally a few small beads and other ornaments have been found.

Don Joaquin Melgarejo who lived on Batan for five months in 1770 offers possible insight into why Batan jar burials contained few funerary goods. He writes that before the deceased is interred in the pottery "oven", all personal ornaments and precious objects are removed, and other belongings e.g. plates, oars, jars are buried.

Solheim describes in detail a jar burial located in a camote field near Basco, the capital of Batan (Figure 61 Otley H. Beyer, "Outline Review of Philippine Archaeology by Islands and Provinces," The Philippine Journal of Science 77 (July-August 1947): 210-211.
62 Ibid., p.211.
63 Solheim, "Jar Burials...," pp.127-128.
The individuals who first discovered the jar had broken into the "jar lid", emptied the jar contents, and then filled the jars with dirt. The burial jar had been buried below the surface of the ground with the bottom of the upper jar about 20-30 centimeters below the surface. Though the bottom of the upper jar was missing, Solheim estimated that the jar height was 67 centimeters and the maximum diameter 56 centimeters. When first emptied the lower jar had been broken, yet Solheim determined that it had a round bottom, an inside depth of 46 centimeters, and a maximum diameter of 51 centimeters. The juncture of the upper and lower jars was unique in that the top jar rested with its shoulders supported by the rim of the lower jar and with its mouth and rim inside the mouth of the lower jar. Outside the jar at the level of their juncture were three flexed burials which suggest that the Batan inhabitants practised several types of burials perhaps contemporaneously. Though no archaeologists have excavated Sabtang Island, there is evidence that jar burials formerly were performed. The present inhabitants have unearthed numerous earthenware jars which they use for storage. The archaeological record indicates that the inhabitants of Itbayat also performed jar burials. Inez de Beauclair excavated child jar burials in stone cairns and also noted "a kind of stone cist grave...." She assumes that the inhabitants performed various burial methods just as the Batan inhabitants did.

64 Ibid., p.128.
65 Ibid., p.130.
3. Botel Tobago

North of the Batanes Islands are the Samasana Islands and Botel Tobago. As early as 1935 an earthenware vessel was found in Imourod along the southern coast of Botel Tobago. The coarse earthenware jar measured 60 centimeters in height and diameter. Though disturbed the jar still contained human remains and an earthenware bowl served as a cover. Kano speculated that the jar contained a flexed adult corpse. Inez de Beauclair contends that "this is highly unlikely, considering the desire of the Yami to dispose of the deceased once and for all, as soon after death as possible." Rather she supposes that the jar contained a child burial. Later in 1969 the inhabitants of Yayu on the northwest coast of Botel Tobago unearthed a broken jar near the shoreline. Inez de Beauclair determined from the sherds that the unglazed earthenware jar had a mouth diameter of approximately 25 centimeters with the shoulders flaring outward to an undetermined circumference presumably larger than that of the mouth. Though the jar contained no human remains, the inhabitants found other associated goods: a small greyish-white bowl of cracked porcelain, four armrings of

68 Ibid., p.167.
translucent blue glass, and 16 small yellow and blue glass beads. In November, 1969 the Garrison Command of Botel Tobago sent other artifacts from the same site to the central administration. The material goods included: the upper half of a large earthenware jar (Figure 21), two white porcelain bowls, an earthenware flask-shaped vessel, nine glass rings, nine strands of small glass beads, five small bronze bells, two iron fragments and two gold pieces. Inez de Beauclair claims that the large jar segment is the top half of a burial jar which had been carefully cut apart to place the corpse into the lower half. She cites a similar process described by Furness for the Berawan tribe of North Borneo.

...On the third or fourth day after the death, the body is squeezed into a large jar, which has been carefully cut apart at its largest diameter.... [T]he upper half is then fitted on tightly, and the crack sealed up with resinous gum.69

Inez de Beauclair dates the Botel Tobago jar burials based upon the associated artifacts and their similarity to other dated sites in Borneo and the Philippines. She contends that the two porcelain bowls which are either Song tradewares or later copies are the best time markers. They establish the twelfth century as the earliest possible date for Botel Tobago jar burials though Inez de Beauclair proposes a more conservative sixteenth or seventeenth century date.

In 1979 Richard Stamps reported another Botel Tobago

jar burial site uncovered by a road crew widenening a road near Lobusbussan two years earlier. Though jars 2, 3 and 5 had been badly broken, Stamps excavated jars 1 and 4 in situ, and found that jar 1 in fact consisted of two interlocking earthenware jars, the top used as a cover for the bottom one. Similarly Jar 4 also was composed of two earthenware vessels and contained 291 bone fragments (Figure 22). "Based on the absence of fusion of the sternal epiphyses of the clavicles and the differential wear of the molar teeth ... it is suggested that the individual was probably between 18 and 23 years of age at the time of death." Stamps obtained two bone samples from burial jar unit 4, but eliminated the first radiocarbon date of 460±600 B.P. because "the collagen level was insufficient." Rather he contends that "[t]he second sample was more successful, producing a larger and sufficient amount of collagen" for which he obtained a radiocarbon date of 1170±145 B.P.

71 Ibid., p.183.
72 Ibid., p.183.
73 Ibid., p.183.
74 Mr. Stamps obtained two radiocarbon dates from two bones that he removed from a single burial jar. He eliminated the first radiocarbon date because the collagen level was insufficient while he accepted the later one because he contends that there was a sufficient amount of collagen. Radiocarbon dates obtained from collagen samples are highly suspect, and there is no reason to assume that the second date is any more reliable than the first one. Furthermore, a single radiocarbon date is virtually meaningless. To resolve this problem, Mr. Stamps needs to perform a series of radiocarbon dates to establish a credible time framework for his Lobusbussan jar burials.
Even though Stamps only unearthed two jar burials and one associated artifact the significance of the excavation is that the archaeologist obtained a controlled, dated sample. Furthermore, the size, shape, construction, and placement of the jars themselves are informative in attempting to develop cultural continuities both on Botel Tobago and other islands.

Dating of jar burials in this part of the world is still tentative but has been suggested to go back to as early as 1500 B.C. for the Philippines ... "the early centuries of the Christian era" for the Batanes ... Tang or Sung times in the Babuyan Islands ... and even later in the oral traditions on Lan Yu .... Given the A.D. 780 date for the jar burial from Lobusbussan, we now have a better understanding of the early occupation of this island. There is no claim that this is the earliest date of occupation for the island, but it does push known examples of this tradition back in time.75

4. Yonaguni Island

The current archaeological record indicates that the westernmost island of the Ryukyu chain marks the northernmost limit of the Philippine jar burial tradition. On Yonaguni Kaneko observed jar burials and urns in the rock shelters, and above these shelters he climbed onto a plateau where he discovered "a cairn of loosely piled coral stones in the middle of a field."76 Later he encountered other similar cairns in the fields which showed signs of recent visits. "We suspect that

75 Stamps, op. cit., p.191.
these cairns were used until very recently, or may, in some instances, be used even now, by families with low economic status."77

The Yonaguni burial cairns recall the Babuyan and Batanes island ones. In both regions the inhabitants built rough coral stone cairns and placed burial jars in the center. Kaneko noted that the Yonaguni inhabitants used a glazed Chinese storage jar for burial purposes. The archaeological record indicates that the Babuyan and Batanes sites often contained earthenware burial jars though the inhabitants claim that they found blue and white jars as well as dragon jars, and Solheim unearthed glazed stoneware jars on Fuga Island. The Chinese ceramics date the Yonaguni and Babuyan and Batanes jar burials and suggest that the inhabitants of both regions performed jar burials over a similar period. Furthermore the similarity in cairn form implies a southern rather than a northern origin for the jar burial tradition since stone cairn-jar burials are not found farther to the north of Yonaguni.


1. Sarawak

The southern expansion of the Philippine jar burial tradition reached the peripheral regions of Indonesia.

77 Ibid., pp.91-92.
untouched by the Brahmano-Buddhist culture. Beyer mentions the early exploration of 20 burial caves in Borneo by A. Hart Everett in 1878-1879.

Everett's early explorations were not very scientifically conducted, and he seems to have removed only a small part of the material found. His notes indicate great similarity with the Visayan Islands and western Mindanao burial-caves. Wooden coffins, broken burial-jars, and quantities of ceramic fragments, rusted iron weapons and tools, and disintegrated skeletal material are the general characteristics, but there is considerable difference in detail, and as between some localities and others.78

Barbara and Tom Harrisson also excavated numerous burial caves in Sarawak of which the West Mouth of the Great Niah Cave already has been discussed. Other sites near Niah include the Upising Cave, Lobang Jeragan, and Lobang Tulang and the Magala burial grottos at Sekaloh. Magala is approximately five miles south of the Great Niah Cave, and is accessible by water along the Niah and Sekaloh rivers.79

...Magala prominently marks that point of the Subis formation where the Sekaloh disappears under the limestone, remaining underground for some distance. The peculiar feature of the mountain and river merging is generally promising from the local archaeologist's point of view, as such locations seem to have been favoured for spiritual reasons as burial grounds. The most notable example in this topographical setting comes from the north-eastern side of the Subis formation, where the Subis River disappears under a limestone outcrop containing the rich burial grounds of the Painted Cave... carrying vivid haematite wall paintings and beautifully carved hard-wood

78 Beyer, op. cit., p.343.
coffins in boat shape in association with early types of imported Chinese ceramics and funereal native earthenware.\textsuperscript{80}

Though previously disturbed by guano diggers, the Magala Cave still contains two "largely untouched" subchambers: Mouth E and Kaya Malam. These chambers represent distinct cultural assemblages. Kaya Malam essentially contained fragmented imported ceramics of the late Song-Ming period in association with metal, glass, and wood objects and secondary burials while Mouth E contained an assemblage of earthenware, stone tools, shell ornaments, and primary and secondary burials. Though the archaeologists reported no jar burials from Mouth E, they noted possible jar burials in Kaya Malam, "the small separate undisturbed space with a NE view over sister cliffs clothed in high jungle trees..."\textsuperscript{81} The majority of ceramics from this section came from the top three inches or from the rock pockets "where only dust had accumulated on them..."\textsuperscript{82} All ceramics had been broken which the archaeologists claim is a regular practice in Borneo burial caves.

To reconstruct the pattern of scatter and disturbance back in time in any one site, it is of course necessary to rebuild original objects from all sherds obtained. This was done ... with gratifying results, useful for the determination of scatter, for an analysis of damage other than ordinary fragmentation and for the examination of provenance and forms represented.\textsuperscript{83}

Harrisson partially reconstructed 53 vessels of

\textsuperscript{80} Ibid., p.148.
\textsuperscript{81} Ibid., p.159.
\textsuperscript{82} Ibid., p.159.
\textsuperscript{83} Ibid., p.160.
which 32 were jars (Figure 23). The jars were Chinese tradewares which were probably exported to Borneo from South China in the Song-Ming period. Of particular interest is that certain types of jars seem to have specific uses. Twenty jars had their necks and rims "extracted for funerary ritual purposes" while the other 12 jars remained intact. Among the broken jars, Harrisson noted four different kinds of damage which possibly relates to jar burial practices.

Four kinds of damage ... may occur separately or combined:

(i) extracted rim: the mouth and lip of a jar having been chiselled or ground away leaving a wider opening with ragged or smooth edges;

(ii) body blow: the jars have received a distinct blow with an instrument in order to cause its split into two halves or its collapse;

(iii) hole in base: a hole chiselled into the base of the jar, probably to allow for drainage of body fluid after burial of a body inside;

(iv) fire: jars used for or during cremation of skeletal remains.

The Upising Cave is another jar burial site which also contained deliberately damaged Chinese tradewares. Of the 13 unearthed jars none was undamaged: seven had extracted rims and most had combined damage (e.g. extracted rim and hole in base, extracted rim and fire, extracted rim and body blow). While the Upising burial

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84 Ibid., p.166.
85 Ibid., p.168.
jars were often large enough to contain several secondary burials, their mouths were invariably too narrow to admit even one intact adult skull. Such jars had to be split or the mouths chiselled. Barbara Harrisson unearthed a large brown glazed stoneware jar which she found in two main pieces (C/3). The lower half contained human bones and a skull, and the upper portion lay upside down four feet away. Another burial jar had its mouth and lip chiselled off to widen it for burial purposes (Figure 24). Harrisson located this medium-sized, orange-brown glazed jar standing upright with a few small bones inside.

Lobang Tulang is one of the six main mouths of the Great Niah Cave and "within easy walking distance" of the West Mouth. In 1958 Barbara Harrisson also excavated this cave and noted:

"...As often experienced in other Bornean sites bearing Chinese ceramics, it was disheartening to find everything broken, not only delicate or small objects, but large, heavy storage and burial jars which would stand a good kick. Most of these sherds (contrary to what we had obtained at other sites) belonged to larger objects, burial and storage jars of all sizes. There was comparatively little in the way of bowls, saucers, or tiny pots so abundant during roughly the same periods in the Sarawak River delta. But those we did find at Tulang match very closely indeed others found in previous years at Sungai Ja'ong near Santubong."

Harrisson unearthed approximately 220 medium-sized and larger jars of which most could not be even one-third reconstructed, and certainly none contained bones.

88 Ibid., p.601.
Whether this cave is a jar burial site remains in question.

2. Indonesia

Elsewhere in Indonesia archaeologists have excavated other jar burial sites. In 1938 W.J.A. Willems excavated a jar burial ground in central Sulawesi at Sa’bang near Palopo. The archaeological report indicates that the jars were "cracked and even compressed", and "filled with the same sandy loam of which the surrounding soil consisted...." Willems found no human remains or associated artifacts so "[w]e are not able, therefore, at present to ascertain the age of this cemetery...."

Ian Glover contends that Ulu Leang 2 is an Iron Age burial cave in South Sulawesi. The 1969 Australian-Indonesian Archaeological Expedition first explored the cave and noted:

Burial caves in Sulawesi are a source of Chinese export porcelain wares on the antique market, and few have escaped probing and subsequent potholing by local dealers. Two important burial caves, Ulu Wae and Ulu Leang 2, had shallow deposits that had been so churned over that any stratigraphic study was impossible. Human bones and decorated potsherds were scattered in fragments,

90 Ibid., p.208.
91 Ibid., p.208.
Glover admits that there is no conclusive evidence which proves that Ulu Leang 2 was a jar burial site, but he claims that the assemblage is so similar to Philippine jar burial assemblages "that this seems most probable." His associate identified approximately 79 vessels of which 57 had mouths large enough to accommodate an adult skull yet none large enough to hold a complete adult corpse. "And it seems that some form of secondary burial is probably represented here..." which Glover dates to the early A.D. centuries.

The Talud Islands lie between the two major islands of Sulawesi and Mindanao. Peter Bellwood contends that the Leang Buidane Cave on Salebabu Island and the Leang Balangerang Rock Shelter on Karakellang Island form "a homogenous entity" which he labels the Buidane Culture. The Leang Buidane jar burial layer contained "an astonishing density of sherds" with a 10-20 centimeter thick sealing layer which suggests that the breakage was not recent. Though Bellwood recovered no unbroken burial jars with bones inside, he believes that the larger jars contained secondary burials (Figure 25).

There are 26 large jars with globular or cylindrical bodies, reconstructible to varying

94 Andrews and Glover, op. cit., p.54.
95 Ibid., p.54.
97 Ibid., p.69.
degrees. It is assumed (mainly from Philippine parallels) that these jars were the major bone containers, together with the boxes to be described below, and their rim diameters are all over 20 cm.\textsuperscript{98}

Non-ceramic artifacts included penannular pottery earrings, shell bracelets, spherical glass beads, stone beads and metal objects. Bellwood claims that both the bronze and iron artifacts date the assemblage to the Early Metal Age. So far he has one radiocarbon date of 510±80 B.P. for charcoal collected from the jar burial layer and a thermoluminescence date of 960 B.P. for one of the baked clay casting valves.\textsuperscript{99}

Bellwood also places the Leang Balangingi assemblage in the same Buidane tradition. Not only are the jar forms similar, but also the associated artifacts match the Leang Buidane assemblage. Bellwood obtained one radiocarbon date of 950±130 B.P. which "is thus satisfactorily contemporary with Leang Buidane."\textsuperscript{100}

Other jar burial sites in Indonesia are attributed to the Early Metal Age. Soejono lists six which include: Salajar; Tebingtinggi, South Sumatra; Ngrambe, East Java; Anjer, West Java; Gilimanuk, Bali and Melolo, Sumba. In 1922 Schroeder reported jar burials on Salajar Island in

\textsuperscript{98} Ibid., p.75.
association with beads, bronze rings, and gold leaves.\textsuperscript{101} The inhabitants of Ngrambe, East Java also excavated a jar burial which yielded metal objects e.g. iron chisels and lance heads and carnelian beads.\textsuperscript{102} Later in 1939 J.C. Noorlander accidentally discovered urns at Tebingtinggi, South Sumatra which contained human bones and burnished gourd-shaped jars with incised decorations.\textsuperscript{103} Soejono contends that "[t]he most interesting sites of urn-burials have been found at an extended region at Melolo, (Sumba)."\textsuperscript{104} Archaeologists unearthed earthenware jars with secondary burials, earthenware flasks, shell ornaments and quadrangular adzes (Figure 26). At Gilimanuk, West Bali\textsuperscript{105} archaeologists also found secondary jar burials, but recovered no associated burial goods while Anjer, West Java\textsuperscript{106} jar burials contained primary inhumations in a crouched position with grave goods (Figures 27, 28). Van Heekeren aptly summarized the various types of Indonesia jar burials which Solheim briefly lists as:

a. Large urns in which human skeletons were interred singly in a squatted position; with them went polished dark-brown earthenware, saucer-shaped cups on stands, flasks with long vertical necks, and crude globular, round-bottomed pots. The decoration is simple and conventional. Example: Anjer, West Java.

\textsuperscript{101} R.P. Soejono, "The History of Prehistoric Research in Indonesia to 1950," \textit{Asian Perspectives} 12 (1969): 84.
\textsuperscript{102} Ibid., p.84.
\textsuperscript{103} Ibid., p.84.
\textsuperscript{104} Ibid., p.84.
\textsuperscript{106} Ibid., p.6.
b. Large urns with skulls and some limb bones only, displaying a secondary burial system. Funeral gifts were specific earthenware, polished flasks with incised geometric patterns and human faces, the lines filled in with white paint, globular pots, shell rings, shell and stone beads and quadrangular stone adzes. Example, Melolo, East Sumba.

c. Huge stone urns or vats. Similar to those of Laos, the latter definitely belong to the Early Metal Age. Example: Central Celebes.

d. Large and small urns mostly of Chinese origin (1300 to 1600 A.D.), containing calcined human bones without funeral gifts. Prolonged until the coming of Islam. Numerous in the South Celebes (Bone, Soppeng, Wadjo).107

107 Solheim, "Jar Burials...", p.142.
III.1. PROPOSED ANALYSIS OF THREE JAR BURIAL SITES

The jar burial tradition represents an unusual burial form which spread in the Philippines and along coastal Vietnam c.400 B.C.-c.A.D. 200. So far archaeologists have unsuccessfully explained the expansion of this cultural phenomenon. Otley Beyer, the father of Philippines archaeology, believed that the migration of a single people brought this tradition from South China in the third to the eighth century. Solheim and Fox claim that the archaeological record does not support an Iron Age migration of a "Jar Burial People". Solheim has demonstrated that the great variety of jar burial forms and associated artifacts is inconsistent with the hypothesis that a single people spread the jar burial culture. Rather he suggests that Nusantao\(^1\) traders

\(^1\) In his article, "Reflections on the New Data of Southeast Asian Prehistory," *Asian Perspectives* 18 (1975): 146-160, Solheim explains his derivation of the word Nusantao. The use of the word Austronesian and/or the compound Malayo/Polynesian for a people and a culture is very awkward, and is incorrect as well. Both terms are for a language family and should not be used for other purposes. Because these people share both a basic culture and a language, it should not be difficult to coin a word for the people and culture from reconstructed protoforms of the language. As these are the people of the islands, I propose the term Nusantau for these people and cultures. (I would like to thank George Grace for giving me the root words nusa for island and tau for man or people.).
brought the custom from South China to Southeast Asia. Beyer believed that the people of the "Gold Urn Burial" first reached the Philippines in the "Early Iron Age", but Fox obtained radiocarbon dates from the Tabon Caves which indicate that the jar burial tradition entered Palawan c.700 B.C. or approximately one thousand years earlier. Though Fox disagrees with Beyer's dates and description of the spread of the jar burial tradition by a single people, he concurs with Beyer that there is considerable evidence that a jar burial complex reached the Philippines from the north. He particularly cites the Babuyan-Batanes jar burials and those unearthed in Japan and Botel Tobago though he believes it is unreasonable "to continue to attribute the presence of jar burial in the Philippines solely to the migration of a Hakka people ... during 'the Iron Age'."\(^2\) Rather Fox contends that jar burials "appeared ... as the result of a number of distinct movements of people, the influences coming from the south and possibly from the north and beginning in the Late Stone Age."\(^3\)

Beyer, Fox and Solheim present various hypothetical theories to explain the origin and expansion of the Southeast Asian jar burial tradition, but none of the conclusions rest on concrete archaeological evidence. I propose to study in detail three jar burial sites: Sa-huynh, Kalanay and Tabon in order to determine whether


\(^3\) Ibid., p.160.
the Southeast Asian jar burial tradition is a culturally related phenomenon or whether Southeast Asians performed jar burials regardless of their cultural origin. First I plan to study the archaeological reports with respect to their ceramic and non-ceramic artifacts. Then I will present a comparative analysis of the assemblages to ascertain possible cross cultural relationships. I chose Sa-huỳnh for four reasons:

1- The site has an extensive jar burial field with numerous ceramic and non-ceramic artifacts;
2- Sa-huỳnh perhaps forms a cultural continuum with other jar burial sites in the region;
3- Parmentier wrote a comprehensive Sa-huỳnh site report;
4- Solheim links the Sa-huỳnh pottery assemblage with the Kalanay Pottery complex.

I included the Kalanay Cave only to complete the cross cultural analysis of the Sa-huỳnh-Kalanay Pottery Tradition. I also analyzed the Tabon jar burial sites for three reasons:

1- The earliest radiocarbon dates for Philippine jar burials come from Tabon;
2- The Tabon jar burial caves contain a wealth of cultural materials which helps to relate particular artifacts with specific radiocarbon dates;
3- Tabon jar burials extend over a long time period which makes it possible to witness a cultural evolution of the jar burial tradition in the area.
III.2. SA-HUỲNH ARCHAEOLOGICAL REPORT

The Sa-huỳnh jar burial site is located in central Vietnam in an area with many Cham speakers. Along the sand dunes situated between the bay and the sea, archaeologists have unearthed numerous burial jars. In 1909 M. Vinet reported to the Ecole Française that he had found jars which contained beads and pottery. For 14 years Sa-huỳnh remained forgotten until 1923 when the Ecole funded the wife of the chief customs inspector to excavate the site. She and the local doctor unearthed 120 jars; in 1934 Colani excavated another 55 jars and in 1939 Janse recovered 30 more. Solheim suggests that there may have been more jars, but the local inhabitants could have destroyed them while gathering saleable carnelian beads. Parmentier also mentions the disturbed condition of the site.

...Mme. Labarre y trouva en effet encore 120 jarres environ et, dans l'intervalle, le dépôt avait été plus ou moins pillé par le village. Cette exploitation est presque continue; depuis trente ans les hommes y cherchent les cornalines, dont la vente est rémunératrice, et les enfants y trouvent mille babioles dont ils s'amusent.4

In 1924 Parmentier arrived in Sa-huỳnh as Chef du Service Archéologique de l'Ecole Française d'Extrême-Orient. He examined the Sa-huỳnh site and photographed "une ou deux jarres avant leur dégagement et les fouiller

ensuite.\textsuperscript{5} Though Parmentier unearthed "une ou deux jarres", he never actually supervised the Sa-huỳnh excavation. Rather two enthusiastic amateurs performed the primary research, and Parmentier wrote the Sa-huỳnh report based upon their observations.

...C'est le résultat de ces recherches que je consigne dans cette note, après avoir pu moi-même voir et photographier quelques jarres en place, en fouiller une ou deux comme vérification et classer, avec les renseignements tout frais de Mme. Labarre, les débris recueillis.\textsuperscript{6}

Parmentier describes two basic types of Sa-huỳnh burial jars: "1° jarres en forme de calabasse; 2° jarres cylindro-coniques... plus hautes."\textsuperscript{7} (Figure 13-B, C, D)

He notes a Type 1 burial jar which covered a footed bowl which contained a skull.

...Elle fut trouvée à Phú-khu’o’ng, en bordure des grandes jarres, du côté de la mer et à 0m.30 en-dessous du niveau extérieur du sol. Des fragments d’os blancs étaient disséminés dans le sable et restaient dans la coupe. Celle-ci fut transportée à la douane où nous l'avons vidée. Le crâne, dont la calotte était en grands morceaux dans la gangue de sable, s'est émietté en petits fragments quand nous avons tenté de le dégager. Parmi les os étaient des débris du crâne, des fragments de vertèbres et de petites côtes, un morceau de fémur ou d’humérus. Aucune dent et aucun bijou.\textsuperscript{8}

Parmentier also describes a Type 2 burial jar which Mme. Labarre had reserved for him to excavate.

...Elle est de forme cylindro-ovoïde avec renfort au bord; ce renfort semble rapporté, mais avant cuisson. La jarre elle-même paraît

\textsuperscript{5} Ibid., p.326.
\textsuperscript{6} Ibid., p.325.
\textsuperscript{7} Ibid., p.327.
\textsuperscript{8} Ibid., p.328.
Trunconical covers originally topped the Type 2 burial jars, but the weight of the sand eventually broke them (Figure 13-A). These covers were rather coarse and very fragile. Dr. Galinier notes that sometimes they were decorated with incised, "assez élégants" geometric designs and then painted red (Figure 29). He describes the patterns as:

...bandes dessinées par deux traits de gravure; l'espace ainsi délimité est peint d'une couleur vermilion. Ces bandes laissent entre elles d'autres bandes de largeur égale, sans couleur et seulement piquetées sur l'axe d'une ligne pointillée en petits traits fort espacés.11

Though Sa-huỳnh is a disturbed site, the burial jars still contained enough funerary goods for Parmentier to obtain "une approximation très suffisante".12 The list includes:

c) Une dizaine de vases tronconiques
d) Une douzaine de vases bombés, marmites ou vases à pied
e) Une vingtaine de coupes
f) Une dizaine de lampes
g) Une vingtaine de marmites et deux ou trois coupes de terre noire
h) Une quinzaine de pesons de fuseau

9 Ibid., p.328.
10 Ibid., p.327.
11 Ibid., p.328-329.
12 Ibid., p.327.
Comme bijoux de verre ou pierre dure:

i) Des perles sans nombre
j) Une cinquantaine de pendants d'oreille
k) Quelques objets de bronze
l) Une dizaine d'outils en fer

An analysis of Sa-huỳnh pottery first includes the undecorated trunconical vases (Figure 30). "Leur aspect, toujours élégant", these red clay vessels are rarely larger than 10 centimeters in height and 20 centimeters in diameter, with either a slightly splayed mouth or a lightly rolled lip. Along the vessel rim Parmentier noted pairs of holes. He reasonably assumes that rattan cords passed through them which "consolide la pièce et permet de l'accrocher aux parois de la case, dépourvue, comme l'on sait, de toute espèce de meubles."

While trunconical vases have flat bases, other Sa-huỳnh vessels have round bottoms. This category contains the rare alms bowl which "[n]ous n'en avons guère recueilli qu'une ou deux...." (Figure 31-D) Parmentier also places the Type 1 burial jar within this category. Other round bottomed red clay vessels recall "la belle forme si courante chez les indigènes pour la marmite de cuivre, calotte sphérique à laquelle se rattache par un angle sec un tronc de cône supérieur." (Figure 31-A) Parmentier describes three other basic variations of the "marmite de cuivre" form: 1- a vessel

13 Ibid., p.327.
14 Ibid., p.330.
15 Ibid., p.329.
16 Ibid., p.330.
17 Ibid., p.330.
"vraimente élégante" with an elongated body (Figure 31-E); 2- one with "une large gorge l'orne sur la panse...." (Figure 32-B); 3- another with an added foot "modelés à part et rapportés avant la cuisson...." (Figure 32-C) Parmentier also notes that certain round bottomed vessels appear "sans doute par pur hasard, comme une réduction des grandes jarres du type 2...." (Figure 32-A) Another vessel recalls this reduced burial jar form, "mais munie d'un pied...." (Figure 32-D)

Parmentier describes two red clay vessels which "offrent un aspect très particulier." One recalls Figure 31-E but is taller and has a foot (Figure 33-A). Also this vessel is decorated with large striated triangles which oppose each other forming irregular plain lozenges. The other unusual vessel looks like two superimposed bowls which Parmentier believes had a flat band around the juncture (Figure 33-B).

The Sa-huỳnh burial jars also contained red clay footed bowls (Figure 34).

La coupe elle-même est en calotte sphérique, redressée au bord en cylindre vertical de faible hauteur. Le pied est un tronc de cône curviligne, rapporté avant la cuisson et plus ou moins haut, plus ou moins sec.

18 Ibid., p. 331.  
19 Ibid., p. 331.  
20 Ibid., p. 331.  
21 Ibid., p. 331.  
22 Ibid., p. 331.  
23 Ibid., p. 332.  
24 Ibid., p. 332.
Only the foot and lip are decorated. A continuous design encircles the lip, and often this pattern decorates the base of the foot. "Le pied offre diverses zones de décors simples, ou des carrés concentriques coupés à moitié par le plan de base." Parmentier divides the footed bowls into large and small sizes: the large ones are 8-11 centimeters high and 15-22 centimeters in diameter; the small ones are 6-8 centimeters high and 10-13 centimeters in diameter.

Parmentier claims that the Sa-huỳnh burial jars contained a previously unknown vessel type (Figure 35). He describes the form as:

...un récipient en sphère aplatie à bord rentrant, porté par un pied qui déborde autour en cuvette annulaire. Cette double disposition semble correspondre à l'intention de retenir la moindre goutte d'un liquide dont le renversement serait dangereux. Aucun dépôt à l'intérieur du récipient ne garantit cependant l'usage que nous supposons. Le pied peut-être sans peine tenu à la main et ces pièces semblent destinées à être portées; elles offrent toujours dans le bas une paire de trous d'attache.

The Sa-huỳnh burial jars also contained another unusual clay form (Figure 36). These "petites masses de terre" were formed by two opposing trunconcial cones joined in the middle, and pierced by a cylindrical canal along the common axis. Though rarely larger than three centimeters, these small objects sometimes were decorated. Parmentier noted that undulating lines

25 Ibid., p.332.
26 Ibid., p.333.
27 Ibid., p.336.
covered one and oblique, dotted lines another. He initially supposed that the "petites masses de terre" were fishermen's net sinkers, but then he realized that the clay was not hard enough especially when saturated with water. Also "l'on ne décore guère des plombs de filet."28 Parmentier notes that European loom weights have a similar shape, yet "l'usage de la quenouille est inconnu en Indochine et le problème reste entier."29

Parmentier also describes other round bottomed vessels which are black colored instead of red (Figure 37):

28 Ibid., p.336.
29 Ibid., p.336.
30 Ibid., p.333-334.
31 Ibid., p.334.

La terre noire dont sont exécutées les pièces les plus soignées est un peu plus résistante que la rouge, mais guère plus. Elle n'est guère mieux expurgée. Elle est utilisée en épaisseurs moindres. La surface est brillante mais sans émail et le vernis léger qu'elle montre dut être obtenu par la cuisson au sel marin. Cette terre n'est pas franchement noire. C'est plutôt de la terre très brune noircie à la surface. Un fragment de coupe, à décor en gravure comme celui des marmites que nous allons examiner, montre une terre noire dans l'épaisseur centrale tandis que les deux surfaces apparaissent rouges dans la cassure; seul le vernis les rend noires au dehors.30

These marmites "offrent une forme en calotte sphérique aplatie que continue sans arête un tronc de cône rentrant; un autre tronc de cône en sens inverse constitue le bord."31 The vessels range in size from 10-18 centimeters high, and often geometric designs decorate them. A usual pattern is alternating isosceles
triangles without bases and banded with parallel lines. Inside the triangles are incised undulating lines. From the banded edge draped garlands encircle the vessel. Other triangular patterns include a saw tooth design or parallelograms created by framing triangles.

The Sa-huynh burial jars contained both ceramic and non-ceramic artifacts. The non-ceramic objects include personal ornaments e.g. bead necklaces and earrings. The beads are either hard stone or rough cut glass (Figure 38). The largest glass beads are 6-9 millimeters and are aquamarine blue. They are cylindrical in shape with blunt circular ends. Mme. Labarre unearthed these beads in many jars, yet found only a few in each vessel. Smaller transparent bluish-green glass beads were more plentiful. The greenish-yellow beads were also quite large while the clear yellow ones were much smaller. Both types of yellow glass beads broke easily. The Sa-huynh burial jars also contained red glass beads. Parmentier describes them as dull red, very hard and extremely small. He also mentions carnelian beads which were often found and sometimes in great numbers. The favorite stone of the "vieux lapidaires", the carnelian beads "se présentent sous plusieurs formes":

1- spherical;
2- flattened squares with double chamfered edges;
3- long lozenges;
4- barrel shaped;
5- six sided barrel shaped.

\[32\] Ibid., p.337.
\[33\] Ibid., p.337.
Parmentier describes other Sa-huỳnh beads as "une forme exceptionnelle."\textsuperscript{34} He mentions an eight sided flat bead (Figure 38-H) and a pentagonally shaped one. Another unusual bead is disk shaped and pierced by an eight millimeter hole (Figure 38-M). Parmentier describes "[u]ne piece ... plus curieuse."\textsuperscript{35} The center portion is a rounded square with two small rectangles attached (Figure 38-K). An olive colored bead has cut off ends (Figure 38-G). To pierce these small beads involved exceptional skill and patience.

...D'ordinaire le tube a été commencé par les deux bouts et le raccord est parfois si précaire qu'un fil très mince seul peut y passer. Il est vraisemblable que ces perles furent enfilées sur un crin, seule matière assez ténue et assez résistante en même temps pour cet usage.\textsuperscript{36}

The Sa-huỳnh burial jars contained not only beads but also two types of earrings. One is a slightly elongated, curved disk which allows the end to pass through the ear. Three rather elegant projections mark the axes (Figure 39-D). Parmentier claims:

\begin{quote}
Ces pièces sont très nombreuses et sont exécutées, comme l'a montré l'analyse, soit en verre, soit dans une pierre dure opaque, siliceuse, à l'aspect du marbre.\textsuperscript{37}
\end{quote}

They measure 23-44 millimeters from point to point. Parmentier supposes that one black clay pair whose hook is too weak to support the weight of the earring, "semble un simulacre votif...."\textsuperscript{38} The other type of earring is

\textsuperscript{34} Ibid., p.337.
\textsuperscript{35} Ibid., p.337.
\textsuperscript{36} Ibid., p.338.
\textsuperscript{37} Ibid., p.339.
\textsuperscript{38} Ibid., p.339.
an asymmetrical split ring often with bevelled edges on the surface (Figure 39-B, C, E, K, M). These hard stone or glass rings measure 27-57 millimeters in diameter. Occasionally these earrings are slightly modified. One unusual kind is square with a round opening in the center (Figure 39-L). The other variation "rappelle le système du pendant d'oreille bombé, car il ajoute au cercle quatre pointes analogues à celles que portent ces bijoux..."39 (Figure 39-F).

The Sa-huỳnh burial jars also contained bronze and iron objects (Figure 40). The bronze artifacts included "[d]eux quarts d'un bracelet simple,"40 a small goblet, a conical bell, and some small bells formed by spiralling bronze wire. Though Mme. Labarre excavated no bronze tools, she unearthed several iron implements. Often these objects were reduced to a rusted mass, yet enough tools had retained their original shape that Parmentier recognized them as agricultural tools.

Plusieurs outils de fer, réduits aujourd'hui à une masse de rouille, ont assez bien conservé leur forme générale pour qu'on puisse les reconnaître comme des outils agricoles analogues au xuong annamite, la bêche verticale pour le dressement des talus de rizières, mais plus trapus....41

III.3. KALANAY ARCHAEOLOGICAL REPORT

Kalanay Cave site is a small burial cave on the northwest coast of Masbate Island only six meters above

40 Ibid., p.340.
41 Ibid., p.340.
the high tide mark. In 1951 Solheim first entered the cave and found the floor scattered with broken pots and human bones. Later the local guide told Solheim that:

...For as long as he could remember, the old folks had been afraid of the cave and feared that the anitos (spirits) would get anyone who entered there. When... quite young, he and the other boys, in a demonstration of bravado, visited the cave briefly. When he first saw the inside of the cave, there were still many whole jars left among the broken pieces and also many bones. Some boys, in an excess of fearlessness, would pick up a skull, a pot or a large sherd and toss it out of the cave, themselves following quickly thereafter.42

Further confusion occurred in the cave when a heavy earthquake collapsed the roof and broke the remaining vessels. Though the Kalanay Cave contents were badly disturbed, Solheim proceeded with the excavation. He divided the cave floor into quarters and "excavated as completely as possible in the time available...."43 The archaeologists recovered 113 vessels and approximately 20 non-ceramic artifacts.

Solheim divided the pottery into two types based upon paste differences. The finer, more homogeneous vessels he classified as Bagupantao and the coarser ones Kalanay. Though the vessels were shattered, Solheim claimed that enough remained to give a good idea of the general shapes. He notes a few exceptions where only a sherd or two describes a vessel.

...At least four pieces of earthenware create a problem by the absence of the greater part of

their remains, and it is possible that many of the most striking objects may have gone flying out the entrance on to the rocks below and have then been washed away by the tide.  

Solheim describes the Kalanay assemblage as varied "in size, shape and decoration...." He classifies these vessels based upon surface treatment: 70% plain, 14% incised, 7% impressed and 9% slipped. The 63 Kalanay Plain vessels include 33 jars, 22 bowls and 8 sherds. Solheim then subdivides the jars into smaller groups based upon size and neck conformation (Figure 41). He lacks overall jar dimensions because he found no complete jars.

Large jars with wide necks - rim diameter 23.6±3.75cm, maximum body diameter 35.8±6.5cm, height not known.

Large jars with narrow necks - rim diameter 11.5cm, maximum body diameter 22.5cm, height not known.

Small jars - rim diameter 11.3±1.72cm, maximum body diameter 14.0±0.82cm, total height 11.5±1.29cm.

Solheim recovered only 12 Kalanay incised vessels: small round spherical jars, large jars with flaring rims, one unusual jar with angled inward sloping sides, one flanged bowl, one shallow bowl with four effigy feet, and one sherd possibly of a model house (Figures 42, 43). Often incised patterns decorate the neck or rim of a jar or the outside of a bowl (Figure 44-1, 2, 3, 4, 5, 6). The elements of the individual designs appear in pairs:

(1) Paired diagonals and borders, with variations including single diagonals or verticals and borders, or wavy lines and borders;

Curvilinear scrolls and triangles;
Rectangular scroll;
Triangles, with variations including alternating triangles and borders or running triangles;
Rectangles and diagonals;
Zoomorphs.46

Kalanay impressed designs decorate six vessels: two jars and four bowls. Solheim identifies three impressed designs: 1- impressed crenelations; 2- an impressed or carved scallop design; 3- a diagonal dip pattern (Figure 44-10, 11, 12). He supposes that the small diagonal dips on the flange or angle were formed by pressing the side of a cylindrical tool e.g. a small reed into the clay. Possibly a finger pressed into the clay and rolled side to side produced the scallop pattern, and the edge of a saltwater bivalve made the crenelated designs which often combine with the scallop pattern. Another impressed design decorates a most unusual bowl (Figure 45-d). The vessel has a crenelated edge perhaps produced by finger impressions along the rim. On the bottom are applied handles that make it impossible for the bowl to sit flat. Solheim speculates that this vessel is actually a lid. Kalanay slipped pottery is similar to Kalanay-Plain except for a fugitive or non-fugitive plain slip. Solheim identifies only eight slipped vessels though others possibly lost their slip over time (Figure 46). Solheim describes one final piece

46 Ibid., p.13.
as Kalanay Untyped. This is a modeled head of an unidentified, broken anthropomorphic form (Figure 43-A). On the left side of the neck are incised triangles which perhaps ran onto a vessel from which it was broken.

The Bagupantao vessels represent only 15% of the Kalanay pottery assemblage. These vessels were better made than the Kalanay ones. The Bagupantao clay was finer and more homogenous while the surfaces were more carefully finished and the firing more controlled. Solheim divides the Bagupantao group into three subtypes: 1- Bagupantao-Plain 2- Bagupantao-Impressed and 3- Bagupantao-Painted. Seven vessels and one sherd represent Bagupantao-Plain (Figure 47). They form 47% of the Bagupantao assemblage. Solheim notes no difference in the method of manufacture between Kalanay-Plain and Bagupantao-Plain although he observed a difference in jar form and surface finish. The three Bagupantao-Plain jars have no straight or inward slanting rims. Rather the rims are high and only slightly flaring. Solheim also observed that Bagupantao-Plain vessels are better smoothed and often more polished than Kalanay ones. Bagupantao-Impressed includes seven vessels (Figure 48-b, c, d, e). The surface is the same as Bagupantao-Plain except all bowls are well polished with lustrous insides. Simple tools formed impressed circles, punctations and crenelations while finger or tool impressions made lenticular designs (Figure 44-x, xi, xii).

One small, incomplete jar represents Bagupantao-Painted ware (Figure 48-f). A heavy, red hematite slip
covers the outside and inside neck of the jar. Over the red slip a white paint is now apparent, but this white originally may have been another colour. Though only one vessel defines this subtype, Solheim claims this is justified "because painted pottery is extremely rare in the Philippines and knowledge of its presence is important."47

The Kalanay Cave contained both ceramic and non-ceramic artifacts (Figure 49). Solheim unearthed approximately 20 non-ceramic objects: seven stone, one glass, one tektite, four or five metal and five or six shell. Four objects perhaps served as pottery making tools. Two complete ovoid stones and a fragment of a third are the same size and shape as stones used for pottery anvils. Solheim found these three stones in association with a large shell operculum. Such shells are used today as tools for polishing vessels before firing. Other implements were unearthed. They found two stone tools. One is a small blue-gray nephrite trapezoidal adze. The adze is 40 millimeters long by 22-28 millimeters wide by 6.7 millimeters thick. The other stone implement is a nephrite groover. Possible personal ornaments include two green jade beads and a portion of a blue glass bead. The glass bead was apparently never completed because the holes from the two ends do not meet in the center. Another find is an unworked tektite which Solheim describes as rather

47 Ibid., p.57.
unusual in shape. Solheim also recovered several unworked cowry shells along with six other shell objects: a cowry shell with a small hole; two bivalve shells with small chips along the edges indicating usage; the end piece of a conical shell with two drilled holes; a fragment of a shell bracelet and an unfinished worked shell.

Other non-ceramic artifacts include bronze and iron implements. The iron fragments were so corroded that Solheim could identify only four tools:

1- a knife blade with a long hooked tang for hafting;
2- an iron point "in situ at the end of an ice pick (sic)...."; 48
3- a two-edged point from perhaps a dagger or spear;
4- a larger two-edged point from perhaps a bolo or sword.

The single bronze artifact is a small thinly encrusted bell 27 millimeters long and 12.5 millimeters in diameter. At the top is a loop with a small clapper swinging from a bar. There are no decorations or inscriptions on the bell.

The remaining materials collected from Kalanay Cave are the skeletal fragments from which Solheim obtained little information. A physical anthropology graduate student from the University of Arizona blood typed six different specimens. He reported that all samples produced "O" type blood reactions, and believes that the bone fragments represent three, possibly four

48 Ibid., p.74.
individuals. One was less than 18 years old and the others older than 18.

III.4. TABON ARCHAEOLOGICAL REPORT

The Tabon jar burial sites include several caves which span more than one time period. This phenomenon makes an analysis far more complex since both the ceramic and non-ceramic artifacts changed over time and from cave to cave. Fox established a jar burial chronology by investigating six caves in detail and by using comparative data from seven others. Further to identify and classify these caves, Fox developed a provisional list of nine pottery types which he designates as the Tabon Pottery Complex.49

1- Tabon Plain - This pottery type includes simply scraped, smoothed and unslipped plain vessels, jars and jar covers. The jars are usually ellipsoidal with round bottoms and restricted necks. Fox also found jars with spheroidal bodies and flat bottoms which perhaps characterize the quite scarce jars of the early phase of the Late Neolithic. Usually the burial jars have flaring lips which are either concave or convex to accommodate the lids. Tabon Plain forms a major pottery type (Figure 50-b, c).

2- Tabon Polished - These vessels are common and also form a major pottery type. They are often slipped

49 Fox, op. cit., pp.78-89.
and have a detectable lustre. Red slipped vessels characterize all periods from the Late Neolithic to the Developed Metal Age. These vessels are more skilfully thrown with thinner walls (Figure 51-a, d).

3- **Tabon Impressed** - This category includes designs impressed upon the vessel surface with a carved or bound paddle or designs impressed with a simple tool upon vessel shoulders, lips or flanges. Fox states that "Tabon Impressed may equal or exceed in number Tabon Plain and Tabon Polished distinguishing the Tabon Pottery Complex from other prehistoric potteries found in the Philippines."\(^5^0\)

**Carved Paddle Impressions.** Carved paddle designs included 1- squares, rectangles and diamonds. 2- ribbed or cross ribbed designs. 3- a combination of ribbed patterns with other impressed designs (Figure 52). Fox was puzzled why paddle impressions were often deliberately obliterated. This "casualness" suggests paddle decorations perhaps served a utilitarian rather than a decorative purpose.

Simple tool designs appear on vessel rims, corner points and flanges. This decorative technique typifies the vessels of all periods, while the scalloping of rims is unusual, and basket impressions have never been encountered.

**Cord Marking.** Cord marked vessels characterize Late Neolithic and Early Metal Age pottery and fade out

during the Developed Metal Age in Palawan. Fox notes two types of cord marking. One has evenly spaced vertical impressions; the other irregularly spaced and placed at an angle (Figure 52-a, c). Cord impressions often cover the entire base of small angle bodied vessels. Peacock suggests that cord marking serves a utilitarian purpose because it provides a better grip.

4- Tabon Incised - These vessels have incised designs only and are distinguished from impressed designs in the method by which the patterns are cut into the vessel body (Figure 53). This type of decoration is quite rare. Fox identifies several patterns:

1- radiating lines (rare);
2- crosshatching;
3- circles;
4- diamonds in bands;
5- curvilinear scrolls;
6- triangular variations. 

Fox also describes a few freely drawn zoomorphic and floral patterns though scrolls and triangles are the most common and often combine with dashes within the scrolls or triangles. Sometimes lime appears in the lines of incised designs. Relatively rare are the wave and scroll designs placed between bands.

5- Tabon Incised and Impressed - Sometimes linear, scroll and triangular patterns decorate vessels in combination with impressed decorations (Figure 54). Fox notes that the impressions were often placed within incised lines or incised decorative motives. This pottery type is not common and never forms more than 10% of the pottery assemblage in any one cave.
6- **Tabon Painted** - This pottery type is only found with certainty in Chamber A Manunggul Cave where the vessels were relatively protected from fading and decay. Fox counted at least nine vessels which were completely painted with red hematite after firing. This decorative technique was usually combined with incised or incised and impressed designs (Figure 55). Other caves have large sherds painted with lime (?) after firing. Fox contends that unfired painting of hematite and lime may have been more common, but perhaps disappeared over time.

7- **Tabon Organic Glaze** - Organic glaze covered few vessels. The Duyong Cave contained one large jar glazed with a translucent organic substance, and Tabon, Diwata and Tadyaw caves also yielded other examples. So far the composition of the glaze has not been identified though Fox is certain "that the material used for the glaze was a resin called *bagtik* locally and "Alamaciga" or "Manila Copal" commercially, which is obtained from a high altitude tree .. in Palawan."\(^{51}\)

8,9- **Tabon Incised and Painted and Tabon Incised and Impressed**: **Painted** - Fox placed these two pottery types in one category because both were rare and highly valued. Sometimes he found only the sherds placed in the burial caves. Hematite was usually painted between incised lines or within incised designs (Figures 1, 55, 56). Fox also found a few sherds with painting separating incised bands especially when incised or impressed designs had

been drawn within the bands. Both pottery types belong to the Late Neolithic and Early Metal Age phases of the Tabon Pottery Complex and disappear completely in the Developed Metal Age.

Just as Fox classified the various pottery types in the Tabon Pottery Complex, he also described the various vessel forms with primary emphasis placed on jar and cover descriptions because these vessels dominate the pottery complex. The common and diagnostic classes are:

(1) Jars:

a. Cylindrical jars with rims which project inward or outward to support covers; flat bottoms (Figure 57-a).

b. Ellipsoidal or spheroidal jars with flaring rims, either concave or convex, rounded bottoms (Figure 57-b, c, d). Covers fit into the concave rims.

c. Ellipsoidal or spheroidal jars with relatively restricted orifices, flat shoulders, in-sloping necks and plain lips; rounded bottoms (Figure 57-e).

d. Ellipsoidal or spheroidal jars with short, slightly flaring or straight necks and plain lips; rounded bottoms (Figure 57-f).

e. Ellipsoidal or spheroidal angle-bodied jars with high corner points and an in-sloping shoulder above the corner points; plain lips and rounded bottoms (Figure 57-g). Covers fit over the rims and on the shoulders of these jars.

f. Others.

(2) Jar Covers:

a. Trunconical covers with sweeping unrestricted contours; or a sharp angle

52 Ibid., pp.90-92.
at the base with an in-turning rim. These covers may fit over the neck or into a concave rim of the jar (Figure 57-h, i, j).

b. Ovaloid, sometimes spheroidal, bowl-like vessels with plain lips, inverted over the orifices of jars [described as vessel forms with "simple and dependent restricted" shapes and "simple contours" by Shepard (1957) 231]. These vessels frequently show chipping around the edge of the lips probably to enlarge the mouth to fit over the necks of jars. Necks of jars were likewise chipped, even removed, to accommodate covers. It is possible that these vessels were not always made as covers per se, being only large utilitarian bowls (Figure 57-k, l).

c. Ovaloid, sometimes spheroidal, bowl-like vessels with corner points and in-turning "rims" (Figure 57-m).

d. Flat covers (Figure 57-n).

e. Miscellaneous covers with knobs, tripod arrangements possibly to support smaller vessels, and figurine covers (Figures 1, 56).

(3) Bowls:

a. Simple bowls; unrestricted vessels with simple contours and plain lips; round bottoms are characteristic, flat bottoms rare (Figure 57-o, p and 51-b, c, d, e).

b. Spheroidal or ellipsoidal shaped bowls; dependent restricted vessels with simple contours and everted lips, convex or concave; round bottoms (Figure 57-q, r, s).

c. Angle-bodied ... or bi-conical... bowls; dependent restricted vessels with composite contours, everted lips, and round bottoms; the corner point may be high, mid-way, or low on the body of the vessel which gives them distinct forms (Figure 57-t, u, v). These are common forms of small bowls. A relatively few angle-bodied bowls are slightly unrestricted, the tangent at the lip being a little greater in diameter than the diameter at the corner point.
d. Angle-bodied bowls with high corner points and in-curving or in-turning "shoulders" on the upper body or on rims; flat or round bases and plain lips; rare (Figure 57-w, x).

e. Carinated bowls . . . ; unrestricted vessels with flaring lips and high corner points; round bottoms; rare (Figure 57-y).

f. Others.

(4) Independent Restricted Vessel or "pots" with distinct necks and restricted orifices:

a. Ovaloid or spheroidal shapes with composite contours, short necks, and everted lips (Figure 57-z).

b. Spheroidal vessels with composite contours, relatively short necks, and plain lips (Figure 57-z-1).

c. Spheroidal vessels with inflected contours, short neck, everted lips, and round or flat bottoms; sometimes a moulded ridge occurs just above the point of vertical tangency (Figure 57-z-2).

d. Spheroidal vessels with complex contours, high corner points (sharp or rounded), short necks, exerted or plain lips, and round or flat bottoms (Figure 57-z-3).

e. Others.

Other less frequent but diagnostic form classes include:

(5) Footed Vessels:

a. Goblets (Figure 57-z-4).

b. Simple bowls with ring feet (Figure 57-z-5).

c. Angle-bodied footed vessels (Figure 57-z-6).

d. Others.

(6) Boxes with covers (Figure 51-f).

(7) Miscellaneous:
a. Spouted vessels (Figure 58).
b. Coffin with square body and rounded cover.
c. Others.

Fox dates the Ngipe’t Duldug Cave to the earliest jar burial period. The cave lies on the east side of Lipuun Point facing Malunot Bay and is approximately 250 feet above sea level. The cave is quite small, and Fox suggests that the jars and other vessels had been placed along the interior limestone ledge and later fell down into the center of the cave. Fox recovered at least eight vessels which include "four small burial jars with a plain, smoothed surface."53 (Figure 50-c). Fox describes three other vessels from the Ngipe’t Duldug Cave:

1- a red slipped bowl with a flaring ring foot and an impressed line and punctuated design on the edge of both the rim and foot base (Figure 50-a);
2- a reconstructed bowl with straight, flaring sides and a flat base (Figure 50-b);
3- a small vessel with an impressed design.

Though the Ngipe’t Duldug Cave vessel count is too small for a definitive comment on the pottery, Fox still contends that "this pottery ... is probably the earliest pottery found in the Tabon Caves."54 Not only the pottery but also the non-ceramic artifacts suggest an early date. Fox unearthed no metal objects or glass beads, but found a stepped adze, a Baler shell scoop, an

53 Ibid., p.105.
54 Ibid., p.105.
oval shell bracelet, and shell, stone and jade beads.

Fox notes that Ngipe't Duldug Cave and Leta Leta Cave had similar assemblages of pottery and stone tools, shell bracelets and stone and shell beads. Fox describes Leta Leta Cave as a fissure-like shelter on the east of Langen Island, Bacquit Bay, El Nido. At the upper end of the precipitous floor, Fox found artifacts and human bones on the ledges on each side of the fissure and in the small chamber. The assemblage included three drinking vessels. One of particular interest is a human headed jar with a yawning mouth (Figure 59). On the surface of the cave floor Fox also found other non-ceramic artifacts: stone and two nephrite adzes, stone pendants and approximately 6000 stone and shell beads. Fox uncovered no bronze, copper, iron or glass or carnelian beads. Fox states that "[t]he cultural assemblage of Leta Leta is without question Late Neolithic and probably represents an early phase of the Late Neolithic circa 1000 to 1500 B.C., or earlier."55 Unlike Ngipe't Duldug Cave, Fox contends that Leta Leta Cave was not primarily a jar burial site because he found only a few jars, and "these may not have been used for burials."56 He unearthed three other types of burials: 1- a primary flexed burial 2- "bundle" bone burials 3- a burial in which the flexed remains were interred in a mound of red hematite. He believes that the last might represent a much earlier burial form.

55 Ibid., p.178.
56 Ibid., p.178.
The Manunggul Cave is located on the western side of Lipuun Point, tucked into a cliff overlooking the South China Sea. Approximately 375 feet above sea level, the cave can be reached only from the side by passing through a gap in the cliff and then climbing a sheer cliff. Fox describes the difficulties involved in reaching the cave.

...It was necessary to construct a perpendicular ladder, ten meters in length, in order to work in the cave. The view from the mouth of Chamber A of the South China Sea and nearby islands is truly magnificent. Certainly this cave was selected as a burial site, as were others, because it formed a majestic setting for the dead, and in spite of the difficulties which would have been encountered in placing the many large jars in the cave.57

The Manunggul Cave is composed of four chambers although only two were used for jar burials. Chamber A is light and dry with a spectacular view of the South China Sea and neighboring islands. Fox describes his first view of Chamber A "as dramatic as its setting; numerous large jars and covers, smaller vessels, skulls and portions of painted human bones scattered over the surface of the cave...."58 To Fox's amazement many of the vessels were in perfect or nearly perfect condition or had crumbled in their original place. The condition of the pottery and its elaborate decoration contrasted greatly with the pottery in Chamber B.

The pottery of Chamber B (and Area C) is distinct from the highly decorated funerary pottery of Chamber A, notably in the limited range of pottery types. The pottery of Chamber B, however, still displays the basic and diagnostic features of the Tabon Pottery

57 Ibid., p.109.
58 Ibid., p.109.
Complex - method-of-manufacture, sand tempering, surface colors, forms of burial jars, trunconical jar covers, smaller vessels with notches on the rims made with a simple tool, angle-bodied wares, slipping, and so forth. Three pottery types are certain: *Tabon Plain, Tabon Polished* and *Tabon Impressed*.59

During the excavation of Chambers A and B, Fox obtained "[e]xcellent charcoal samples, apparently from ritual fires, ... which were forwarded immediately for radiocarbon analysis."60 For Chamber A he obtained two radiocarbon dates of 2840±80 B.P. and 2660±80 B.P., and for Chamber B one radiocarbon date of 2140±100 B.P.61

...The field estimates of the relative age of the assemblages from the two chambers which were sent with the C-14 sample were later revised, however, for it was originally thought that the plain pottery in Chamber B was the earliest. The final C-14 determinations show, on the contrary, that the assemblage of Chamber A was the earliest. The C-14 dates as published ... for Manunggul Cave, Chambers A and B, are thus reversed. The completed excavations of these two chambers also revealed highly distinct assemblages ... - Chamber A being late Neolithic and Chamber B, Developed Metal Age with iron.62

In Chamber A Fox found 78 jars, jar covers, and smaller earthenware. He was overwhelmed by their variety and form and describes them as "a clear example of a funerary pottery...."63 An outstanding vessel from Chamber A is a secondary burial jar with incised, impressed and painted decorations (Figure 1). On top of its removable lid is a boat in which two figures sit. The rear figure holds a steering paddle although the

59 Ibid., p.117.
60 Ibid., p.111.
62 Fox, op. cit., p.111.
63 Ibid., p.112.
blade is missing. The forward person presumably represents the soul of the dead whose bones rest in the jar. Fox illustrates two other Chamber A burial jars (Figure 53). The one is angle-bodied with squared off shoulders which slope inwards towards the mouth. The other is spherical with rounded bottom and shoulders and a straight neck. Incised and curvilinear scroll patterns decorate both jar shoulders. Other noteworthy vessels are two jar covers: one has three bird-like heads surrounding an opening in the top of the lid (Figure 56-a); the other cover has a tripod superstructure with thumb curved feet (Figure 56-b). Fox suggests that this tripod could have supported smaller vessels which contained ritual offerings. Another unique vessel is a ring-footed bowl with a saddle shaped roof joined at the rim of the bowl (Figure 56-f). An incised and painted stirrup design covers the roof. Though the inhabitants predominately performed jar burials, Fox unearthed a pottery coffin for secondary burial. The coffin was in the form of a tree trunk with a mat impression on the base. Even though archaeologists have found no wooden coffins of this period in Palawan, the fact that the pottery coffin assumed a tree trunk form suggests that such prototypes existed. At the Niah Cave Tom Harrisson recovered a tree trunk coffin with a radiocarbon date of 2460±70 years B.P.

Non-ceramic artifacts from Chamber A include a few shell beads (primarily thin and flat); "possibly barrel
shaped beads of a black-and-white-banded onyx" and 83 jade beads. Fox divided the jade beads into three types: 1- roughly polyhedral in cross section; 2- roughly rectangular in cross section; 3- disk shaped, fairly thin with rounded edges. He also noted that jade beads were drilled from both ends in long sections which could form two or more beads. Then these sections were broken into individual beads. Fox unearthed other personal ornaments from Chamber A. These included nine distinct bracelet fragments: four jade, three agate and two limpet shell. Also he excavated a perfect jasper ear pendant and a red colored chalcedony (?) pendant. No glass beads and/or bracelets or metals were found.

Though Chamber B Manunggul Cave lies just behind Chamber A, a chronological gap exists between the two. Fox describes Chamber A as Late Neolithic while he identifies Chamber B as Developed Metal Age. He classifies the intervening period as the Early Metal Age to which he assigns the Uyaw, Duyong, Guri, Tabon and Batu Puti caves.

The surface and subsurface levels of Duyong Cave at Iwaig and Uyaw Cave on Lipuun Point yielded almost identical cultural assemblages. The Uyaw Cave is located on the north side of Lipuun Point between Guri Cave and Pagayona Cave. Jar sherds and small earthenware vessels covered the floor of this light and dry cave. Fox noted that the cave revealed no stratigraphy. He found chert

64 Ibid., p.115.
and flake tools on the cave floor and in the subsurface levels mixed with the jar burial assemblages.

...It is probable that more or less the present disturbed floor was frequented by the flake tool people of nearby Guri Cave and then used again, thousands of years later, for jar burial.65

Both Uyaw and Duyong caves contained similar jade ornaments which included lingling-o ear pendants, bracelets, beads and stud-like objects (Figure 8). The excavation of lingling-o pendants was particularly important to Fox. He claims that these ornaments "heretofore have been rarely collected in Philippine sites and not outside of the central Philippines, particularly Luzon...."66 Both the Duyong and the Uyaw caves yielded the "Sa-huỳnh type" of lingling-o pendants with three pointed projections on the axes of the jade oval. In the Uyaw Cave Fox recovered another type of lingling-o which he describes as "similar to a type found in Hong Kong... although these may also be from northern Indo-China."67 These earrings are jade with plain or grooved ring surfaces. Another unusual ornament includes a jade ear pendant excavated from the Duyong Cave (Figure 8-a). Fox describes this doubled headed earring as "perhaps the finest jade ornament found to date in the Philippines, a superb and beautifully proportioned example of ancient carving in jade."68

Fox excavated other personal jade ornaments. The

65 Ibid., p.119.
66 Ibid., p.126.
67 Ibid., p.129.
68 Ibid., p.129.
Duyong Cave contained two basic types of jade and chrysoprase bracelets (Figure 60). One is rectangular in cross section and fairly thin and wide; the other is narrower and thicker with rounded edges formed by polishing and grinding. Another type of jade bracelet with distinctive budlike projections characterizes only this Early Metal Age period. The Duyong and Uyaw caves also yielded jade stud-like objects which Fox believes inlaid wooden ear plugs (Figure 8-j). The Tagbanwa people of Palawan formerly inlaid mother of pearl designs in their wooden ear plugs. One type of stud is disk shaped and pointed with concave sides; the other is oblong with a saddle shaped crown which may be grooved or plain. Both caves also contained jade beads. The five types most often recovered are:

1- large with a diamond profile, regular polygonal cross section, and blunt ends;
2- cylindrical with squarish cross section;
3- cylindrical with cross section of irregular polygon and more or less rounded corners;
4- short cylindrical with cross section of irregular polygon, also with more or less rounded corners;
5- round with large holes.

Jade beads are diagnostic ornaments of both Late Neolithic and Early Metal Age sites while carnelian beads identify a site as either Early Metal Age or later. Fox recovered 11 types of carnelian beads. They are red and translucent and show similarities in shape with other types of stone beads. The most common and numerous types are:

1- round beads of various sizes some being unbelievably tiny, less than 2 mm;
2- barrel-shaped;
3 - biconical;
4 - cylindrical and long but sloping slightly towards the ends;
5 - flat with a triangular profile.

Although glass ornaments are rare in the Early Metal Age, Fox excavated three unusual glass beads and two fragments of a glass bracelet. One glass bead is red and opaque and is extremely small (1mm.). The other two are the largest glass beads that Fox has ever found in the Philippines.

...The sides of one of these large beads, a transparent light green glass, are formed like the wings of the cicada and are identical to the designs of the jade ear pendants....

The other bead is a darker green glass and is also transparent and polyhedral in cross section. Both beads have impurities with many bubbles. The bracelet fragments are colorless and quite eroded and crazed. Fox notes that these pieces appear round in cross section though slightly flattened on the inner surface.

Other non-ceramic objects included shell and clay ornaments. Late Neolithic shell beads were especially numerous in the Duyong Cave. Fox also found a cone shell bracelet, but "not a single bracelet made of shell was found in Uyaw Cave." Fox contends that shell bracelets are uncommon in Metal Age jar burial caves, and suggests that possibly "shell bracelets and beads were too mundane to be placed in the burial jars with the superb ornaments made of jade and other colorful stones." Both the Uyaw

69 Ibid., p.137.
70 Ibid., p.140.
71 Ibid., p.140.
and Duyong caves contained shell *lingling-o* ear pendants and pointed studs. Fox supposes that the inhabitants produced these shell ornaments to replace lost or buried jade ones. Other shell burial goods include shell spoons made from the curved portion of the Chambered Nautilus (Figure 61-b, c, d). Fox also recovered a number of bivalve shells with a high sheen along the edges which the Palawan and Tagbanwa workers identified as rice scrapers (Figure 61-g). Fox contends that "[i]f these are actually agricultural tools, we have suggestive evidence for the appearance of rice or another grain during the Early Metal Age."72 Fox also unearthed clay ornaments from the Duyong Cave. Eight simply curved and slotted ear pendants recall jade prototypes, and a round clay object with a lateral perforation and an impressed groove on the top surface might be a pendant (Figure 62).

Other non-ceramic objects from the Duyong and Uyaw caves include bronze implements and fragments of copper in association with Late Neolithic stone tools. Fox excavated a perfect socketed bronze adze in the Uyaw Cave and two pottery molds for casting similar adzes in the Duyong Cave. Both caves also contained fragments of bronze spear points. At Duyong Fox found small, plain knife blades and fragments of small, round wire.

While Uyaw and Duyong artifacts characterize Early Metal Age assemblages, Fox identifies three other caves which he dates to the Developed Metal Age. From the

ritual fires inside Chamber B Manunggul Cave, Fox obtained a charcoal sample which yielded a radiocarbon date of 2140±100 B.P. This date acts as an important time marker because Chamber B contained a Developed Metal Age assemblage which included iron artifacts. Consistent with previous estimates for the introduction of iron into the Philippines, the radiocarbon date establishes an absolute rather than a relative date for the first appearance of iron in Palawan.

Chamber B Manunggul Cave characterizes Developed Metal Age jar burial sites and is distinct from earlier caves in the limited range of pottery types. The pottery still displays the basic features of the Tabon Pottery Complex although the number of pottery types has been reduced to three: 1- Tabon Plain; 2- Tabon Impressed; 3-Tabon Polished. Tabon Plain vessels are simply scraped, smoothed and unslipped pottery. Tabon Impressed "consists solely of vessels with designs impressed on the rims or on flanges at the throats of the jars." The cord marked or paddle impressed patterns which "form[ed] a major category of surface treatment in the Tabon Pottery Complex, particularly in the pottery of the Late Neolithic and the Early Metal Age" no longer decorate the vessels. Chamber B contained only one Tabon Incised sherd which Fox believes came from Chamber A. One or two vessels had perforations forming designs on the ring feet which is rare in the Tabon Pottery Complex. Another bowl

73 Ibid., p.117.
74 Ibid., p.99.
had perforations below the rim, and one trunconical cover had perforations at the corners of the in-turning rim.

The non-ceramic artifacts from Chamber B typify Metal Age sites throughout the Philippines. Fox found iron fragments and one piece had a mat impression in the rust oxidized crust. Beads were abundant. Four types of glass beads were found:

1- round, red-brown, opaque glass beads;
2- small round, light blue glass beads;
3- round, slightly opaque and larger green glass beads;
4- round, small, translucent and dark aquamarine glass beads.

Jade beads were also common as well as carnelian ones. Two sizes of barrel shaped onyx beads were found although Fox believes that they might have come from Chamber A. The cave also contained the Neolithic type of green, disk shaped shale beads. Fox also excavated three kinds of shell beads: 1- large ring-like beads; 2- tiny disk beads and 3- small cowry beads with the dorsal surface removed. Dr. Alastair Lamb claims that the five faceted black and white stone beads from Chamber B are possibly unique in Island Southeast Asia though known in Mainland South Asia. The white bands bordering the facets were made by etching with acid.

Other non-ceramic artifacts from Chamber B included Chambered Nautilus shell spoons which are similar to ones recovered from Batu Puti Cave (Figure 61-f).

...The striking similarities of the glass and shell beads, glass bracelets, the shell spoons, as well as pottery between Chamber B of Manunggul Cave and one assemblage of artifacts from Batu Puti Cave clearly indicate that these
two sites were used for jar burial at approximately the same time.\textsuperscript{75}

Another Developed Metal Age site is Pagayona Cave. This jar burial cave is 200 feet above sea level at the base of a cliff on the north-eastern face of Lipuun Point. The site contained the largest number of perfect or nearly perfect vessels found in any burial cave. Fox describes the cave when first discovered as:

...almost filled with jars and other vessels resting on its present surface; a thrilling and remarkable scene when it is remembered that the pottery vessels were about 2000 years in age. Many of the jars, jar covers and smaller earthenware vessels were in perfect condition; others composed of large fragments which had merely collapsed in place. A number of the smaller bowls were found nestled in stone cairns along the walls of the cave, and the jars with round bottoms were supported in some instances with stones placed around their bases. All of the forty vessels have been restored...\textsuperscript{76}

The Pagayona Cave vessels belong to the Tabon Pottery Complex although changes in decorative styles are apparent. Actually Fox describes the designs as unimpressive. Only two vessels carry cord marked or paddle impressed decorations, and incised designs are also quite rare. Painting is totally absent. This tendency towards simplicity of decoration explains why Fox noted only four pottery types:

1- Tabon Plain;
2- Tabon Polished;
3- Tabon Impressed;
4- Tabon Incised and Impressed.

Trunconical lids and inverted bowls covered the

\textsuperscript{75} Ibid., p.118.
\textsuperscript{76} Ibid., p.145.
Pagayona burial jars (Figure 63). The bowls with restricted openings were chipped around the edge to facilitate their use as covers. One particularly unusual burial jar cover had a small knob on top. The pottery assemblage also included small angle-bodied jars and a pouring vessel with a tall neck and an animal (?) headed spout (Figure 58). Fox found few artifacts other than pottery on the Pagayona Cave floor. The non-ceramic objects included a Chambered Nautilus shell spoon and a clay ear pendant. A further screening of the cave floor and the subsurface deposits produced only a few other artifacts: fragments of two iron objects; fragments of three bronze tools (large and small blades, harpoon); two shell beads; nineteen carnelian beads; and five glass beads (one light blue glass, four opaque red glass). Fox believes that the scarcity of grave goods suggests that robbers looted the burial jars in former times. This would explain why the jar covers which had been sealed with lime or lime/resin had been removed.

Fox dates Tadyaw Cave also to the Developed Metal Age. One of the largest jar burial caves on Lipuun Point, Tadyaw is the only one whose mouth does not face the sea. Fox estimated that at least 500 jars, jar covers and smaller vessels covered the surface of the cave floor. He found most of the vessels scattered in the three dark interior chambers and only a few in the front and rear entrances. The Tadyaw pattern of placing burial jars in the dark interior represents a divergence from the more usual Tabon practice of placing burial jars.
in the dry and sunny entrance chambers.

The simplicity of decoration which characterizes the Pagayona Cave pottery is even more pronounced on Tadyaw vessels. Fox examined thousands of sherds and found "only a handful" with incised or impressed designs. The pottery is predominantly Tabon Plain and Tabon Polished with highly polished red slipped vessels extremely rare. Fox recovered a few Tabon Impressed sherds with the designs limited to rim impressions: a few cross ribbed patterns and one cord marked design. One sherd has an incised rectangular meander pattern which characterizes Iron Age pottery of the central Philippines but not the Tabon Pottery Complex. A large fragment of a possible cover belongs to the Tabon Incised and Impressed category with Arca shell impressions in bands and triangles. Tabon Glazed is present but not common.

Though the Tadyaw pottery tends toward simplicity of decoration, Fox notes a remarkable variety and number of trunconical covers which he believes reflects a local Developed Metal Age specialization (Figure 64). He also comments on certain similarities in pottery forms between Tadyaw and Pagayona caves. Both contained angle-bodied vessels, and possibly similar tall necked pouring vessels.

The Tadyaw Cave also yielded non-ceramic artifacts. Fox unearthed numerous iron fragments including portions of spear points, chisels and knives. These have

\[77 \text{ Ibid., p.153.}\]
proyecing shanks or tangs for inserting into a handle. Though few in number, bronze and copper fragments were also present.

Other non-ceramic artifacts include personal ornaments. Fox found portions of green glass bracelets similar to the ones excavated from Chamber B Manunggul Cave. Four types of glass beads were common:

1- large, light blue;
2- dark cobalt blue;
3- small, opaque red;
4- large, opaque red.

Fox first encountered opaque red glass beads in Early Metal Age sites, but he notes that these beads are more numerous in Developed Metal Age jar burial caves. Tadyaw Cave also contained carnelian and jade beads as well as two types of gold beads, one of which is identical to a kind found in Chamber B Guri Cave. Fox also unearthed jade bracelets and notes a particularly unusual one with four projecting lobes "which was beautifully decorated."78 (Figure 65) Other artifacts include shell bracelets, the Neolithic type of shell ear pendants, large olive shell pendants and shell scoops.

Fox contends that the ceramic and non-ceramic assemblages from Tadyaw and other Developed Metal Age caves indicate:

...there are no unique horizon markers either in the pottery or associated artifacts which would indicate new and extensive movements into the area at the time that Tadyaw Cave was used for burial. Certainly, there must have been new movements of people into Palawan and the Philippines during the Developed Metal Age,

78 Ibid., p.153.
increasing external contacts, and possibly the beginnings of actual external trade as Beyer has stressed. More extensive movements of people into Palawan, as indicated by changes in the types of artifacts, seem to have taken place during the Late Neolithic and the Early Metal Age. 79

III.5. COMPARATIVE ANALYSIS OF SA-HUYNH, KALANAY AND TABON POTTERY FORMS

With Tadyaw Cave I now complete the review of the Sa-huynh, Kalanay and Tabon archaeological reports. Throughout the summary I have carefully recorded only what the individual archaeologists have observed and have avoided any comments. With a foundation from which I can expand, I will proceed with a comparative analysis of the jar burial assemblages which incorporates my observations with the opinions of other scholars. The main purpose of the analysis is to determine if cross cultural relationships existed among these jar burial sites and/or whether the jar burials represent isolated regional phenomenon. I will focus special attention on Sa-huynh and Kalanay because Solheim places the two sites in the Sa-huynh-Kalanay Pottery Tradition. He defines a pottery tradition as: "a recognizable set of pottery forms and decorations, distinct from any other set of forms and/or decorations that continues through time for many

79 Ibid., pp.155-156.
generations.”

If Solheim is correct that Sa-huynh and Kalanay share a common pottery tradition, then perhaps the two regions also share a similar jar burial tradition.

First I will re-analyze and compare the pottery assemblages. Tabon presents a particularly difficult analysis because the Tabon report includes six burial jar sites which span more than one cultural period. Fox describes the "common and diagnostic" Tabon vessel forms in which he includes seven burial jars and seven burial jar covers (Figure 57). Though he establishes descriptive categories for burial jars, Fox does not itemize the number of jars in each category or record the caves in which he recovered the jars except in four instances. He published drawings of a Guri Cave burial jar (Figure 66), three Chamber A Manunggul Cave burial jars (Figures 1, 53), a Ngipe't Duldug burial jar with "a relatively straight neck and an ellipsoid shaped body...." (Figure 50-c), and a floor plan of the Pagayona Cave which shows the forms of all restored vessels (Figure 63). The Pagayona floor plan is particularly important in a comparative analysis of other iron-using jar burial sites. Fox dates the Pagayona Cave to the Developed Metal Age or c.200 B.C.-c.A.D.200, which makes this Tabon jar burial approximately 80 Wilhelm G. Solheim II, "Philippine Prehistory," in The People and Art of the Philippines ed. Gabriel Casal et al. (Los Angeles: Museum of Cultural History, University of California, 1981), p.49.

81 Fox, op cit., p.105.
contemporaneous with Sa-huỳnh and Kalanay. Like other Tabon jar burial sites, the Pagayona Cave contained burial jars placed inside a sunny chamber which overlooks the sea. The illustration indicates that the jars were placed on the surface of the cave and the variety of jar forms suggests local specialization and elaboration of burial jars and covers.

A comparison of Sa-huỳnh and Tabon burial jars indicates that the Tabon Caves contained a greater variety of burial jars interred in a method unrelated to that of the Sa-huỳnh urn fields. Parmentier records two basic burial jar forms: "jarres en forme de calebasse" and "jarres cylindro-coniques ... plus hautes."82 (Figure 13-B, C, D) I agree with Solheim that the rare "calebasse" burial jar is actually a lid. This means that Mme. Labarre unearthed only one type of burial jar: round bottomed and cylindrical in shape with virtually no neck and a wide mouth. In contrast the Tabon Caves yielded numerous burial jar forms. Though Fox excavated an occasional wide mouthed jar, the majority have restricted necks with a variety of mouth shapes. Thus no evidence of direct borrowing of jar burial forms exists between Sa-huỳnh and Tabon. Rather I suggest that any similarity in shape derives from usage and not a cultural exchange of pottery forms.

The Sa-huỳnh and Tabon burial jar forms show no cross cultural borrowing nor does the method of burying.

82 Parmentier, op. cit., p.327.
the jars indicate close cultural exchange. The Tabon burial jars were deposited in dry caves flooded with sunlight. Several caves were nestled into the sheer faces of limestone cliffs, "consciously chosen for their beauty. A few... caves could only have been reached with ladders and placing the jars in these caves would have been an extremely difficult task...."83 Inside the caves the jars rested on the floors often along the interior walls or ledges. While the Tabon burial jars were never actually buried, the Sa-huỳnh ones were buried in the sand dunes "...située entre une baie et la mer."84 No precipitous rocks were scaled, but rather the inhabitants buried the jars in an expedient manner.

Though the Sa-huỳnh and Tabon burial jars are dissimilar in form, the burial jar covers exhibit certain similarities. The Tabon burial jars had either simple inverted bowl-like lids or trunconical covers. Fox notes that Tadyaw Cave contained a "great number and variety of trunconical covers...."85 He suggests that these covers represent a local specialization during the Developed Metal Age, and illustrates eight different types with small pairs of holes for eventual attachment to the burial jars (Figure 64). Sa-huỳnh burial jars also had trunconical and inverted bowl covers. Parmentier indicates that there are two trunconical cover forms: one has a slight lip or edge and the other plain edged and

83 Fox, op. cit., p.73.
85 Fox, op cit., p.155.
proportionally elongated. The Sa-huỳnh trunconical covers are often decorated with incised rectangular meander patterns which are sometimes painted red and white (Figure 29). This type of decoration is unknown on Tabon Developed Metal Age pottery which exhibits a "trend towards simplicity of decoration...".86 Fox describes Tabon Incised and Painted vessels only in Chamber A Manunggul Cave.

Vessels of these two pottery types are rare ... and were apparently highly prized, for sometimes only sherds of these pottery types were placed in the burial cave. The hematite was usually painted between incised lines or within incised design elements.... A few sherds were recovered with painting separating incised bands, notably when incised or impressed design elements (e.g. dashes) had been drawn within the bands.87

A certain vagueness surrounds the original Kalanay archaeological report. Solheim never directly asserts that Kalanay is a jar burial cave. He mentions that when his guide was quite young, he saw the inside of the cave which still contained "many whole jars left among the broken pieces and also many bones."88 The implication is that the jars contained the bones, but that is not necessarily the case. Later Solheim unequivocally stated that "[t]his small burial cave contained jar burials, associated earthenware pottery and a few associated artifacts."89 I assume that he contends that the Kalanay Cave site contained jar burials for three

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86 Ibid., p.149.
87 Ibid., p.87.
88 Solheim, The Archaeology of Central Philippines, p.25.
possible reasons: 1- His guide once saw many whole jars in the cave; 2- Solheim found jar sherds there; 3- In the Philippines, caves facing the sea often contain burial jars along the interior ledges. I have no doubt that Kalanay was a burial cave. The skeletal remains support this conclusion, but whether the "large" jars contained burials is another matter which has yet been proven.

The second problem with the Kalanay data when comparing its "burial" jars with those from Sa-huynh and Tabon is that Solheim excavated only the neck and rim portions of "large" jars. Without overall dimensions or body shapes for the partially reconstructed vessels, it is nearly impossible to make any jar comparisons. Furthermore, I question whether the "large" jars are, in fact, as "large" as Solheim implies. The wide necked jars have rim diameters of 23.6±3.75 centimeters and maximum body diameters of 35.8±6.5 centimeters. If I use the smaller measurement for body diameter of 29.3 centimeters, then the body circumference would be 92.0 centimeters. This dimension suggests a smallish rather than a "large" jar as does also the rim diameter of the so called "wide necked" jars. I do not mean to suggest that these jars could not be used for burial, but if they were, they contained secondary adult burials or primary child burials. Also it seems most unlikely that the two narrow necked jars were used for burial purposes. Only small bones could pass through such a narrow opening although the jars could function as storage vessels for
burial rites.

Though Solheim claims that Kalanay is a jar burial site, the questionable data prevent any such positive conclusion. In contrast Sa-huynh and Tabon are definitely jar burial sites and the general condition of the pottery assemblages makes a more positive identification of the burial jars. If I compare the Kalanay jars with those from Sa-huynh and Tabon, the only element I can analyze is the mouth size and form. Solheim divides the large wide and narrow necked jars into three types: straight rim, slightly flaring rim and inslanting rim. These rims recall Tabon ones and are extremely common with a wide distribution in Southeast Asia. A comparison of Sa-huynh and Kalanay rim shapes indicates that the Kalanay Cave contained no wide mouthed jars like those which characterize Sa-huynh. The burial jar Parmentier unearthed measured 77 centimeters high and 47 centimeters in neck diameter or nearly twice as wide as the Kalanay jars.

The disturbed condition of the Kalanay Cave also hinders any comparative analysis of burial jar covers. Solheim identified two vessels as possible lids although he found no jars or lidded jars in situ. Figure 46-\textit{f} and Figure 46-\textit{g} have almost identical rim circumference, and both large pieces were slipped. Solheim suggests that:

...what appears to be a bowl may have been the lid for the jar. As the complete rim was not present in either vessel, they could not be physically placed together to see how they would fit. Bowl \textit{f} probably has a slightly larger diameter than \textit{g}, which, if then used for
A lid, would fit down over the rim of g and rest on its shoulders.\textsuperscript{90}

Another possible cover is Figure 67-\textsuperscript{d}. "The groove around the rim of this vessel suggests either that it was made to be used with a lid, or that it was a lid."\textsuperscript{91}

Though the Kalanay Cave report contains virtually no information about burial jars and covers, the absence of data infers two important points: 1- The Kalanay Cave yielded no trunconical covers while the Tabon caves contained a variety and Sa-huynh two types. Perhaps a stronger link exists between Sa-huynh and Tabon than between Sa-huynh and Kalanay. 2- Solheim excavated 33 jars, 26 of which he describes as large. Though the cave yielded numerous jars, Solheim has identified only two jar covers. I assume that when the children smashed the Kalanay Cave assemblage, they randomly picked up artifacts and threw them around or out of the cave. If this supposition is correct, then the likelihood of destroying jars is equal to the likelihood of destroying jar covers. Yet there are 26 jars and only two possible covers. This condition suggests two possibilities: 1- Most jars did not have covers which means most jars were probably not burial jars; 2- The Kalanay jar covers were made of wood and rotted over time.

A comparison of the jars and covers from Sa-huynh, Kalanay and Tabon indicate that regional variations far outnumber the similarities in pottery

\textsuperscript{90} Solheim, \textit{The Archaeology of Central Philippines}, p.51.

\textsuperscript{91} Ibid., p.36.
form. Fox excavated a variety of burial jars while Parmentier describes only one basic type. These Sa-huynh jars are wide mouthed in contrast to the numerous Tabon vessels with restricted necks. The Kalanay jars are in such fragmentary condition I cannot compare them with the other two sites except to mention that Solheim found no wide mouthed jars and that the rim shapes are similar to the Tabon ones. Both Sa-huynh and Tabon burial jars had trunconical covers, although Tabon exhibits an elaboration of trunconical forms while geometric patterns often decorate the Sa-huynh covers. Possibly Kalanay covers are round bottomed, inverted bowls which were also excavated at both Sa-huynh and Tabon.

While archaeologists unearthed numerous burial jars and covers, the three sites also yielded other pottery vessels. Fox describes the floor of Chamber A Manunggul Cave as scattered with "numerous large jars and covers, smaller vessels, skulls and portions of painted human bones...";92 the Uyaw Cave "covered with disturbed sherds of jars and smaller earthenware vessels..."93 and the Pagayona Cave "almost filled with jars and other vessels... a thrilling and remarkable scene...."94 From these caves Fox collected "at least 1500 whole or reconstructable earthenware vessels and tens-of-thousands of sherds...."95 He describes the "common and diagnostic" forms of the Tabon Pottery Complex and

92 Fox, op. cit., p.109.
93 Ibid., p.119.
94 Ibid., p.145.
95 Ibid., p.75.
provides an illustration to accompany the descriptive categories (Figure 57). The illustration indicates that round bottomed bowls and pots predominate while ring footed vessels appear only occasionally. Fox isolates the more unusual vessel forms and discusses them separately. He cites five funerary vessels from Chamber A Manunggul Cave:

1- a burial jar with a cover topped with a ship of the dead (Figure 1);
2- a jar cover with three animal or bird heads surrounding an opening (Figure 56-a);
3- a tripod topped lid (Figure 56-b);
4- a red slipped bowl with a ring foot and a saddle roof-like construction (Figure 56-f);
5- a pottery coffin.

Elsewhere in the Tabon report, Fox illustrates other unusual examples of funerary pottery which are not included in the illustration of characteristic vessel forms of the Tabon Pottery Complex. He depicts:

1- two Chamber A Manunggul Cave burial jars with incised and impressed designs (Figure 53);
2- Chamber A Manunggul Cave ring footed vessel (Figure 56-e);
3- Guri Cave burial jar (Figure 66);
4- Ngipe't Duldug Cave ring footed bowl, flat bottomed bowl and burial jar (Figure 50);
5- Tabon Incised and Painted shallow bowl (Figure 55);
6- Diwata Cave bowl with an inturning rim (Figure 51-d);
7- Batu Puti Cave covered bowl which contained painted teeth of more than one individual (Figure 51-f).

A comparison of the "common and diagnostic" Tabon vessels with Sa-huynh pottery indicates that both regions manufactured and/or used similar pottery forms. Parmentier describes carinated, round bottomed and footed bowls which have a wide Southeast Asian distribution.
Apart from these standardized pottery shapes, Parmentier also records four unusual types: pottery spindle whorls (?) (Figure 36), trunconical covers (Figure 13-A), lamps (?) (Figure 35), and a footed pot which looks like two superimposed bowls joined in the middle (Figure 33-B). Such Sa-huỳnh vessels, except for the trunconical covers, have not been recovered in either Tabon or Kalanay nor have the remarkable or unusual Tabon vessels been unearthed elsewhere.

Both Fox and Parmentier describe their respective pottery assemblages as single pottery complexes while Solheim divides the Kalanay pottery assemblage into two separate ones: Kalanay and Bagupantao. He describes the Kalanay pottery as showing "much variation in size, shape and decoration....",96 but I contend that basic Kalanay vessel forms differ but slightly from the other two regions. Solheim excavated the usual round bottomed, carinated and footed bowls though unusual forms also emerged. Solheim recovered a large jar with an "applique around the neck."97 This added piece forms "a rough square of about 24 cm. on a side, with rounded corners, and a large circular perforation at each corner tangent to the jar."98 (Figure 68-c) Other unusual Kalanay vessels include tetrapod bowls and ring stands with diamond and T-shaped cut out designs. A particularly interesting tetrapod bowl is one with four effigy feet.

97 Ibid., p.36.
98 Ibid., p.39.
(Figure 43-B). Three other pottery forms puzzle Solheim. One is a deep bowl with finger impressions around the rim and on the bottom are added handles which make it impossible for the piece to sit flat (Figure 45-d). A modelled head Solheim categorizes as Kalanay Untyped (Figure 43-A). This anthropomorphic form was broken off from an unknown larger piece. A sherd of a possible house model also remains.

From the Kalanay Cave Solheim recovered 17 Bagupantao vessels which he claims belongs to a separate pottery tradition. "Whatever the case, this much can be said: Kalanay and Bagupantao pottery represent two different traditions."99 I question whether Solheim has enough evidence to prove Bagupantao and Kalanay are separate pottery complexes. The Bagupantao Pottery Complex contains only 17 reconstructed vessels, and in six instances (35%) only one sherd identifies a vessel. Furthermore the small sample of Bagupantao vessels indicates that the pottery is similar in form and design to Kalanay pottery. Both complexes contain round bottomed, carinated and footed bowls. Solheim states that "[t]here was considerable overlap between the two complexes, but in most cases, it was not difficult to distinguish between them on the basis of the clay."100 The Bagupantao pottery was generally better made than the Kalanay vessels with more carefully finished surfaces and more controlled firing. Solheim distinguishes two minor

99 Ibid., p.70.
100 Solheim, "Philippine Prehistory," p.52.
differences between Bagupantao and Kalanay vessels. 1-Bagupantao pottery has ringstands with triangular cut outs while Kalanay ringstands have no triangular cut outs. 2- The Bagupantao-Plain jars have only high, slightly flaring rims, and no straight or inslanting ones. These comparisons involve very small numbers. There are only three Kalanay bowls with ringstands and seven Bagupantao ones, and the Bagupantao jars include only portions of two restored jars and one sherd.

A comparison of Sa-huynh, Kalanay and Tabon vessel forms indicates that round bottomed, carinated and footed bowls are common to all three sites. I believe that these vessels compose the bulk of the pottery assemblages though neither Fox nor Parmentier published vessel counts for the respective forms. Instead Parmentier describes a tentative grave goods list:

La série des pièces recueillies ne peut pas donner un tableau complet du contenu des ces jarres, puisqu'un grand nombre de ces objets, à Thanh-duc surtout, ont été volés, mais elle fournit une approximation très suffisante.

Cette série, entrée au Musée de l'École ne compte que les classes suivantes:

c) Une dizaine de vases tronconiques
d) Une douzaine de vases bombés, marmites ou vases à pied
e) Une vingtaine de coupes
f) Une dizaine de lampes
g) Une vingtaine de marmites et deux ou trois coupes de terre noire
h) Une quinzaine de pesons de fuseau

Comme bijoux de verre ou pierre dure:

i) Des perles sans nombre
j) Une cinquantaine de pendants d'oreille
k) Quelques objets de bronze
l) Une dizaine d'outils en fer

101 Parmentier, op. cit., p.327.
Excluding the burial jars and covers, Parmentier's list includes 90 pottery objects of which 25 are unusual: the "dizaine de lampes and quinzaine de pesons de fuseau" or 28% of the pottery assemblage. Elsewhere Parmentier discusses the contents of the jars.

Les jarres ... sont analogues et contiennent à peu près les mêmes objets; ... il se compose des pièces suivantes: une et deux marmites noires, une ou deux coupes, une objet bizarre que nous appelons lampe, un outil en fer, souvent un peson de fuseau, des objets de parure, perles en verroterie, cornalines percées, pendants et anneaux d'oreilles, en pierre dure ou en verre, parfois un objet ou des grelots de bronze, souvent des débris d'os humains.  

Of the six pottery items Parmentier includes two unusual forms or 33% of the pottery assemblage. The 28% and 33% figures suggest that the majority of Sa-huynh pottery are ordinary vessels. The Kalanay data also support a similar conclusion. Solheim identifies 90 Kalanay vessels of which eight are unusual in form. This means 9% of the pottery assemblage is strikingly different or the vast majority are common. Though Fox never recorded how often certain vessel forms appeared, his report indicates that most vessels are round bottomed, carinated or footed bowls and/or vases. He recovered nearly 1500 whole or reconstructable vessels for which he isolates only 17 unusual forms.

The unusual pottery forms indicate that each region developed specialized vessels which neither overlapped nor spread elsewhere. Footed bowls are a common vessel

102 Ibid., p.326.
form yet only Kalanay has ringstands with cut outs. Round bottomed and carinated bowls characterize these pottery complexes though only Kalanay contained tetrapod bowls and one shallow bowl with effigy heads for feet. Also unusual is an anthropomorphic clay head. Other vessels which identify Kalanay are the bowl with added base handles and a possible house model. Parmentier describes three unusual vessels which characterize only Sa-huynh. The lamps (?), the spindle whorls (?) and the double inverted bowl form represent local pottery developments which remained distinct from the other pottery traditions. The same regional isolation of unusual forms occurs at Tabon where "one of a kind" funerary vessels come from the jar burial caves.

III.6. COMPARATIVE ANALYSIS OF SA-HUYNH, KALANAY AND TABON POTTERY TYPES AND PATTERNS

Not only pottery forms but also decorative methods identify cultural complexes. Fox claims that three major pottery types predominate in all Tabon caves: Tabon Plain, Tabon Polished and Tabon Impressed.

...Tabon Impressed may equal and exceed in number Tabon Plain and Tabon Polished, distinguishing the Tabon Pottery Complex from other prehistoric potteries found in the Philippines. And, Tabon Impressed usually exceeds incised potteries in number wholly unlike the Kalanay Pottery Complex.\textsuperscript{103}

\textsuperscript{103} Fox, \textit{op. cit.}, p.80.
This pottery type includes cord marked or paddle impressed designs. Fox describes three carved paddle impressed patterns: 1- squares of various sizes, rectangles, and diamonds; 2- ribbed (or 'grooved') and cross ribbed impressions; and 3- though rarely, combination of ribbed patterns with other impressed designs. Cord marked vessels characterize Late Neolithic pottery and "fad[e] out in Palawan during ... the Developed Metal Age".104

Fox includes two common cord marked patterns: 1- vertical, evenly spaced impressions; and 2- irregularly spaced and made at an angle to the body.

Tabon Incised designs form the next most common pottery type. In this category I include Tabon Incised, Tabon Incised and Impressed, Tabon Incised and Painted, and Tabon Incised and Impressed: Painted. Fox describes the incised designs as:

1- radiating lines (rare);
2- crosshatching;
3- circles;
4- diamonds in bands;
5- curvilinear scrolls;
6- variations of the triangle.

Elsewhere Fox illustrates 24 different Tabon incised patterns of which ten are scroll and curvilinear designs and nine triangular patterns (Figures 51, 56, 69). This indicates that nearly all of the incised patterns are either curvilinear or triangular which supports Fox's statement that "[s]crolls and triangles form the most common incised design, and are frequently combined with

104 Ibid., p.83.
dashes incised (or impressed) within the scrolls or in triangles...."105 Examples include the designs on two burial jars from Chamber A Manunggul Cave (Figure 53). Tabon Painted vessels are extremely rare, and in this category I place any painted vessel whether it is decorated or not. Fox questions whether he is justified in designating a separate group for Tabon Painted vessels since Chamber A Manunggul Cave is the only site where he found these wares. In this cave at least nine vessels had been painted with hematite after firing. Other caves yielded sherds with lime (?) painting applied after firing. Elsewhere Fox recovered painted wares in combination with incised and/or impressed designs. Examples of this decorative technique are: the burial jar with the cover topped with a manned canoe; an incised bowl with four holes near the rim; and the saddle-roofed vessel.

Plain vessels also dominate the Kalanay Pottery Complex. Solheim cataloged 90 Kalanay vessels and identified 70% as plain and 9% as slipped. The slipped vessels are the same as the Kalanay-Plain ones except a fugitive or non-fugitive red slip covers the outside surface of the jars and bowls. Solheim subdivides the remaining vessels into two subgroups: 14% incised and 7% impressed. He also describes a variety of designs in which he identifies six incised and three impressed

105 Ibid., p. 85.
patterns as follows (Figure 44):

(1) Paired diagonals and borders, with variations including single diagonals or verticals and borders, or wavy lines and borders;

(2) Curvilinear scrolls and triangles;

(3) Rectangular scroll;

(4) Triangles, with variations including alternating triangles and borders or running triangles;

(5) Rectangles and diagonals;

(6) Zoomorphs;

(7) Impressed crenelations;

(8) Impressed or carved scallop design;

(9) Impressed tool.\textsuperscript{106}

Solheim describes Bagupantao pottery types as Bagupantao-Plain, Bagupantao-Incised, Bagupantao-Impressed and Bagupantao-Painted. Of the 17 Bagupantao vessels 47\% or eight are plain; 6\% or one incised; 41\% or seven impressed; and 6\% or one vessel painted. These percentages indicate that Bagupantao pottery is often decorated. The inclusion of Bagupantao-Incised is perhaps unjustified. This pottery type includes only one jar with diagonal dashes on the base of the neck. Bagupantao Impressed designs form the second largest pottery type. Simple tool impressed designs include circles, punctations and/or crenelations which recall similar Kalanay designs. Solheim found no Bagupantao slipped vessels although he unearthed one small painted

\textsuperscript{106} Solheim, The Archaeology of Central Philippines, p.13.
jar. A heavy hematite slip covered the outside and inside the neck. Below the shoulder three parallel bands were painted over the slip.

Parmentier describes the Sa-huỳnh pottery types and designs in isolated snatches of information, several unclear plates and line drawings of decorated pottery. He mentions one red painted trunconical cover with no other form of decoration and describes others:

...en bandes dessinées par deux traits de gravure; l'espace ainsi délimité est peint d'une couleur vermilion. Ces bandes laissent entre elles d'autres bandes de largeur égale, sans couleur et seulement piquetées sur l'axe d'une ligne pointillée en petits traits fort espacés.

Un des mieux conservés est le chapeau de jarre ... à décor de grecque.... Il avait 0 m.232 de largeur extérieure, au fond. Un autre ... a de même un décor de grecques, mais bien plus allongées; il a perdu ses couleurs.

Le bord d'un autre ... montre dans sa partie cylindrique une alternance de rectangles divisés par une croix de Saint-André en sections de couleurs différentes et des bandes pointées....

Parmentier noted a sherd decorated with a pattern of undulating, sinuous lines and framed with a vertically banded border (Figure 70). A small, coarse red pottery bowl has "un décor de grandes hachures qui zèbrent la panse en dessinant de vagues losanges" while "rayures ondulées" cover a small footed vase "comme des coups de griffes...." Parmentier describes two unusual red pottery vessels. The one is decorated with "grands triangles, opposés par la pointe et rayés, tandis que le

108 Ibid., p.331.
109 Ibid., p.331.
110 Ibid., p.331.
losange irrégulier qu’ils déterminent est nu et peint en rouge."\(^{111}\) (Figure 33-A) The other vessel looks like two superimposed bowls with the curvilinear upper section decorated with "triangles isocèles, séparés par des bandes nues. Ils ne sont ornés que de pointillés sur leurs axes verticaux tandis qu’une zone étroite, décorée de même, les arrete en haut."\(^{112}\) (Figure 33-B)

Patterns decorate the cylindrical edge and foot of ringstand bowls (Figure 34).

\[\ldots\text{Le bord offre une ornementation constante qui se repète parfois en bas du pied, alternance de bandes verticales nues, peintes en rouge, et de bandes sans couleur, souvent rayées de hachures verticales. Le pied offre diverses zones de décors simples, ou des carrés concentriques coupés à moitié par le plan de base.}\(^{113}\)

While the ringstands have limited zones of decoration, the lamps are completely patterned (Figure 35).

\[\ldots\text{Le dessus reçoit des bandes verticales ou de large triangles isocèles, parfois curvilignes, sans base. Le pied s’orne des mêmes triangles isocèles ou de rectangles concentriques...}\(^{114}\)

Parmentier mentions that Mme. Labarre unearthed black pottery which was not really black, but rather blackish-brown on the surface, black in the center, and reddish towards both the inner and outer surfaces. He identifies two types of black pottery: footed and round bottomed bowls (Figures 37, 71-C).

\[\ldots\text{Le décor est sur les marmites uniquement en gravure; il est obtenu par l'impression de petites lignes ondulées ou par un pointillé}\]

\(^{111}\) Ibid., p.332.

\(^{112}\) Ibid., p.332.

\(^{113}\) Ibid., p.332.

\(^{114}\) Ibid., p.333.
spécial fait avec un poinçon triangulaire ....
Le décor est formé d'éléments géométriques qui se réduisent à un petit nombre de motifs, mais présentent cependant un aspect très varié; il est toujours placé sur le dessus de la panse et une guirlande aux anses très peu profondes s'y suspend. Le décor de beaucoup le plus fréquent est une alternance de triangles isocèles aigus, sans base, placés tête-bêche et séparés par des bandes nues qui dessinent ainsi une ligne de bâtons rompus. Les faux triangles sont rayés de hachures en lignes ondulées parallèles à l'un des côtés obliques et dans le même sens pour toute la pièce....
Sous le filet ondulé d'en dessous, se suspend la guirlande en segments de cercle doubles ou triples, plus ou moins réguliers. Parfois... les triangles sont jointifs et l'opposition des surfaces rayées sur surfaces nues dessine un motif en dents de scie.
On voit encore une division en losanges sur un ou deux rangs, les uns rayés se détachant sur le fond des autres nus....
Une alternance de chevrons nus et rayés apparaît, simple, sur un débris, ou à deux brisures,... Parfois même nous trouvons un quadrillé en losange sur une petite pièce ..., ou une espèce de ligne zigzaguée formée par l'irrégularité des losanges que le décorateur a voulu créer, mais sans succès. Enfin les traits en chevrons se serrent parfois en masse continue en deux ou plusieurs séries et déterminent un losange nu à leur rencontre.... Ces pièces ont parfois un petit décor en hachures obliques ondulées sur la tranche du bord....

From the original drawings and photographs Parmentier published, I established a more systematic analysis of Sa-huynh patterns and pottery types. I recorded 13 patterns of which Figure 72-a, d, g, h, k are variations of the same triangular design. Figure 72-a also incorporates Figure 72-i; and Figure 72-f and i are generated from a similar herringbone pattern. Of the 13 patterns I noted that triangular designs predominate and curvilinear patterns occur only three times. Malleret

115 Ibid., pp.334-335.
makes a similar observation when he remarks that "[t]oute cette ornementation se ramène à des thèmes géométriques dans lesquels la ligne droite prédomine." 116

I then analyzed the original Sa-huỳnh photographs to determine how often these designs appeared and what decorative techniques were used to create them (Figure 73). I assumed that the photographs were a representative sample of Sa-huỳnh pottery and noted that of the 15 vessels six or 40% had triangular patterns, one or 6.6% linear, one or 6.6% rectangular meander, one or 6.6% basket work impression, one or 6.6% plain, and five or 33% indistinguishable. From the photographs I then determined the Sa-huỳnh pottery types: one or 6.6% plain, four or 27% incised, five or 33% impressed, and five or 33% indistinguishable.

I compared these results with a similar selection of Sa-huỳnh vessels from the Malleret article (Figure 74). He includes 26 photographs of Sa-huỳnh pottery with nine different designs: five or 19% curvilinear on a cord marked or paddle impressed ground; four or 15% triangular; four or 15% plain; three or 12% herringbone; three or 12% cross grass; three or 12% linear; one or 4% rectangular meander; one or 4% spiral; one or 4% basket; one or 4% indistinguishable. Next I recorded the decorative techniques used to create the designs: eight or 30% incised; seven or 27% impressed; six or 23%

incised and impressed; four or 15% plain; and one or 4% indistinguishable. A comparison of the Parmentier and Malleret articles indicates that impressed and incised designs often decorate Sa-huynh pottery and that triangular and curvilinear patterns are the most common.

A comparison of pottery types among the three burial sites indicates that cord marked and paddled impressed patterns cover Sa-huynh and Late Neolithic Tabon pottery while plain pottery characterizes Developed Metal Age Tabon pottery. Plain pottery also dominates the Kalanay Pottery Complex with absolutely no evidence of cord marked or paddle impressed vessels. Though Solheim notes that Kalanay Cave contained no paddle impressed vessels, he claims that other types of impressed patterns were used. He particularly describes impressed crenelations, impressed or carved scallop designs and impressed tool patterns. Incised designs also decorated Kalanay pottery as was the case with Sa-huynh and Tabon vessels.

Not only pottery types but also patterns vary among the sites. Fox never really indicates how often certain Tabon designs occur on the pottery though his illustrations show that approximately one-third to one-half of the Tabon designs are circular or curvilinear while Parmentier describes three curvilinear designs and Solheim only one. Other Tabon designs focus on triangular and rectangular patterns with the triangle more commonly developed as is also the case with Sa-huynh designs. I recorded 13 Sa-huynh designs of which five or 38% incorporate a triangle. While Tabon and Sa-huynh
developed triangular patterns, this geometric design did not often decorate Kalanay vessels. Solheim records only two triangular patterns which include a triangular meander and a triangular cut out on ringstands.

The Sa-huỳnh drawings indicate that Sa-huỳnh Figure 72-a, d, g, h, k are similar to Tabon Figure 69-n, o, q, r, t; yet the likeness does not reflect a direct borrowing but rather a similar preference for triangular designs. Little pattern overlap exists between Kalanay and Tabon. The only possible comparison is between Tabon Figure 69-k and Kalanay Figure 44-2.

A brief comparative study would suggest that the primary ties of the Tabon Complex are with Niah in Borneo and Sa-huỳnh in Indo-China, less so with Malaya, Thailand, and South China; and only secondarily with the central and northern Philippines, at least as the Kalanay Pottery Complex is presently described by Solheim ...."\(^{117}\)

The Sa-huỳnh and Kalanay vessels form the foundation for the Sa-huỳnh-Kalanay Pottery Complex, yet a systematic comparison of Sa-huỳnh and Kalanay patterns indicates that the majority of patterns are regionally distinct. Solheim identifies two Kalanay triangular patterns with no comparable Sa-huỳnh counterparts. The isolated zoomorphic Kalanay figures also have no Sa-huỳnh equivalent nor does the Kalanay interlocking scroll pattern appear on Sa-huỳnh vessels. The same holds true for Kalanay Figure 44-5. There is no similar Sa-huỳnh design. Though the vast majority of Kalanay and Sa-huỳnh patterns indicate little or no cultural overlap, there

\(^{117}\) Fox, op.cit., pp.97-98,
are possibly three similar patterns. Kalanay Figure 44-1 are sets of paired diagonals with borders which recall the paired vertical lines of Sa-huỳnh Figure 72-j. At both sites crenelated herringbone designs decorate vessels although the Kalanay herringbone often combines with a lenticular shaped impression which never decorates Sa-huỳnh pottery. Another recognizable likeness exists between Kalanay Figure 44-3 and Sa-huỳnh Figure 72-b although the Sa-huỳnh Greek fret pattern may not have a common origin with the more oblique Kalanay rectangular meander. While Kalanay pottery indicates that certain patterns have no Sa-huỳnh counterparts, the same design relationship exists between Sa-huỳnh and Kalanay. The triangular Sa-huỳnh patterns Figure 72-a, d, g, h, k do not decorate Kalanay pottery nor do the three curvilinear designs Figure 72-c, l, m.

If I accept the Solheim definition of a pottery tradition as "a recognizable set of forms and decorations, distinct from any other set of forms and/or decorations, that continues through time for many generations", then the Sa-huỳnh-Kalanay vessels do not belong to a single tradition. Both regions share a few similar decorative patterns, but the overwhelming evidence indicates that the majority of designs remain distinct. Cord marked and paddle impressed designs decorate Sa-huỳnh vessels, yet the Kalanay Cave contains none. The triangle forms the basis for several Sa-huỳnh

geometric patterns although Kalanay exhibits only two triangular designs. Archaeologists recovered footed bowls from all sites, but only Kalanay had decorative cut outs on the ringstands. I contend a systematic comparison of Sa-huỳnh and Kalanay decorative elements proves that the pottery from these two sites represent separate and distinct developments. Any cultural borrowing is minimal with each region combining and developing its own local pottery designs and forms.

III.7. COMPARATIVE ANALYSIS OF SA-HUỲNH, KALANAY AND TABON NON-CERAMIC ASSEMBLAGES

Archaeologists recovered non-ceramic artifacts from the Tabon, Sa-huỳnh and Kalanay sites. Problems arise in any study of Tabon artifacts because of the number of caves and time span involved. The Tabon Late Neolithic jar burial caves e.g. Chamber A Manunggul Cave and Ngipe’t Duldug contained primarily decorative ornaments and stone and/or shell implements. From Chamber A Manunggul Cave Fox recovered shell, stone and jade beads, stone and jade bracelets while Ngipe’t Duldug Cave yielded a stepped adze, a Baler shell scoop, one shell bracelet and shell and stone beads including jade. Fox found no metal implements or glass or carnelian beads. The simple array of non-ceramic artifacts continues into the Early Metal Age. Both Uyaw and Duyong yielded almost
identical assemblages which included early metals, jade ornaments, ancient glass beads and a developed jar burial complex. The bronze tools, glass beads and jade lingling-o earrings represent new cultural materials. In fact Fox describes these artifacts as "diagnostic... of the Early Metal Age"\textsuperscript{119} which he dates to c.700 B.C.-c.200 B.C. The Developed Metal Age follows the brief Early Metal Age, and Fox describes two Developed Metal Age jar burial caves: Pagayona Cave and Tadyaw Cave. He found few objects other than pottery in the Pagayona Cave: a Chambered Nautilus shell spoon, a clay ear pendant, two iron objects, three bronze implements, two shell beads, nineteen carnelian beads and five glass beads. The Tadyaw Cave also contained a sparse assemblage of iron fragments in association with bronze and copper pieces, green glass bracelets, four types of glass beads common to the Metal Age, carnelian beads, jade beads and bracelets and two types of gold beads. The artifacts from Chamber B Manunggul Cave also typify Developed Metal Age jar burial sites. Fox found iron fragments, four types of glass beads, jade and shell beads, green glass bracelets, Chambered Nautilus shell spoons and five faceted black and white stone beads unique in island Southeast Asia. Other artifacts include two round pebble polishing tools perhaps used in pottery making and two ellipsoid shaped pebble hammers.

The Kalanay Cave contained only 20 artifacts. 

\textsuperscript{119} Fox, \textit{op. cit.}, p.126.
Solheim recovered two complete ovoid stones and a fragment of a third. They were the same size and shape as stones used for pottery anvils. Among the other stone artifacts were two polished stone tools, a trapezoidal adze and a groover, and two stone beads. Solheim also unearthed one unworked tektite and a portion of a blue glass bead. The bronze and iron artifacts identify Kalanay as a Metal Age site and include a badly corroded iron knife blade, a possible iron dagger blade and a small bronze bell in association with an unworked cowry shell and six other shells. The shell artifacts consist of one cowry shell with a small hole, two used bivalve shells, an end portion of a conical shell with two drilled holes, shell bracelet fragments and a piece of worked shell.

The non-ceramic Kalanay artifacts are similar to the Tabon Developed Metal Age assemblage. These sites contained iron implements, sometimes bronze objects, assorted shell, jade, carnelian and glass beads, shell, jade and glass bracelets, shell and clay ear pendants, shell spoons and stone implements. A comparison of the assemblages indicates: 1- Each cave contained only a few burial goods. 2- The artifacts are simple, unsophisticated burial goods which basically subdivide into ornaments and tools. 3- Though the Developed Metal Age witnessed the use of iron, the Kalanay and Tabon inhabitants continued to bury Late Neolithic type tools and ornaments with their dead.

Parmentier describes the non-ceramic jar burial
assemblage as "[d]es perles sans nombre, [u]ne cinquaintaine de pendants d'oreille, [q]uelques objets de bronze et une dizaine d'outils en fer."\textsuperscript{120} The numerous beads include ones made of glass, carnelian and other stone, and the Sa-huynh ear pendants fall into two categories: curved split discs with pointed lobes and chamfered-edged split discs. While Mme. Labarre unearthed numerous decorative ornaments, she excavated only a few metal objects. Parmentier mentions a small bronze goblet, a bronze bell without a clapper, small bells made of spiralling wires, two unidentifiable bronze fragments, one-half of a bronze bracelet, and several fragments of iron tools.

A comparison of the non-ceramic artifacts suggests Sa-huynh, Kalanay and Tabon belonged to an interregional trade network. Of the 20 Kalanay objects perhaps six arrived through trade: two iron implements, a clapperless bronze bell, two jade beads, and a portion of a glass bead. The Sa-huynh assemblage also contained numerous stone and glass beads while the Tabon Caves yielded carnelian and glass beads as well as glass bracelets. Fox believes that:

\ldots the Early Metal glass beads and bracelets \ldots were brought by new movements of people into Palawan from probably the south and southwest, along with bronze and copper, the "lingling-o" and other types of jade ear-pendants, carnelian and jasper beads, and a highly sophisticated funerary pottery; possibly shortly before iron appeared.\textsuperscript{121}

\textsuperscript{120} Parmentier, \emph{op. cit.}, p.327.
\textsuperscript{121} Fox, \emph{op. cit.}, p.139.
Fox suggests that South China and/or Indo-China was a possible origin of the ancient Tabon glass. A likely source for the small bronze Sa-huỳnh objects is the bronze producing Dongson culture north of Sa-huỳnh. Possibly the stone ear pendants also originated in the North. Vietnamese archaeologists note a strong relationship between the lingling-o ear ornament and a spilite earring unearthed at Lung-hoa. They trace the lingling-o form from the proto-Vanlangian period through the Dongson Bronze Age though there is a conspicuous scarcity of lingling-o ear pendants at Dongson itself. Their small size made stone ear pendants easy to transport which could explain why archaeologists recovered them in both Sa-huỳnh and Tabon.

Not only do the non-ceramic artifacts indicate interregional trade, but also they suggest possible regional occupations. Both Kalanay and Tabon contained shell artifacts which imply a sea oriented culture which placed a premium on shell manufactured goods. The shell ornaments and tools undoubtedly formed part of their indigenous culture, while jade and glass ornaments and metal tools represented ceremonial exotica. From the Kalanay Cave Solheim recovered stone polishing tools and a smoothed operculum shell. These implements are useful in pottery manufacture and suggests that the inhabitants of Kalanay produced pottery. The Sa-huỳnh assemblage contained no shell artifacts which would imply the inhabitants were not a sea oriented people. Rather Parmentier describes iron agricultural tools necessary
for rice terrace production.

III.8. CONCLUSIONS
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A study of the Sa-huỳnh, Kalanay and Tabon archaeological reports reveals that these jar burial sites share a common burial tradition, but the individual sites exhibit local not cross cultural developments. Both Tabon and Sa-huỳnh practised jar burials yet they differed substantially in form. Sa-huỳnh burial jars are fairly homogeneous in size and shape with large wide mouths and trunconical or bowl covers. Along the sand dunes, the inhabitants buried the deceased in jars. Although bone fragments remain, there is no conclusive evidence as to whether the jars contained cremated remains or secondary burials. In comparison the Tabon burial jars exhibit a variety of shapes and sizes. Though an occasional wide mouthed jar emerges, the majority have restricted necks and several different mouth forms. While Mme. Labarre unearthed burial jars in the Sa-huỳnh sand dunes, Fox recovered jars from the floors and ledges of well lit limestone caves which honeycomb the Tabon region. Fox believes that the jars contained secondary burials, not primary or cremated remains.

A comparison of burial jars emphasizes the local nature of the "way of death" as does an analysis of pottery forms and patterns. Sa-huỳnh, Tabon and Kalanay
contained a consistent repertoire of round bottomed, carinated and footed bowls. Though these regions shared common vessel forms, they separately developed pottery forms which exhibit no cultural exchange. The only example of a similar pottery shape is the trunconical covers and/or vase form shared between Tabon and Sa-huỳnh. Otherwise there is no overlap of specialized forms e.g. the Sa-huỳnh lamps, the Kalanay anthropomorphic head, the Tabon effigy vase. Pottery patterns also exhibit regional specialization. Highly complex curvilinear and triangular designs cover Tabon vessels while different triangular patterns decorate Sa-huỳnh pottery. The lenticular or scallop shape pattern as well as meander designs characterize Kalanay.

While the pottery assemblages indicate regional specialization, the non-ceramic artifacts suggest that the jar burial sites shared a similar level of social and technological development. Though minor differences occurred among the assemblages, they primarily contained personal ornaments and tools and/or weapons. Of the decorative ornaments, archaeologists often recovered beads, especially glass and carnelian ones. Though Parmentier mentions no glass bracelets, both Fox and Solheim unearthed glass and shell ones. In fact, shell artifacts are the only non-ceramic artifacts which distinguish Tabon and Kalanay from Sa-huỳnh. The Philippine jar burials contained not only shell ornaments but also shell implements which indicate that stone and shell objects still played an important role in the
burial tradition though exotic trade items were also included. Archaeologists also excavated small numbers of bronze and iron artifacts. The bronze objects included small bells, a goblet, knife and harpoon points and a bracelet while the iron included agricultural implements and spear and knife points.

The non-ceramic artifacts suggest that Sa-huỳnh, Kalanay and Tabon formed part of a Southeast Asian trade network. They received or possibly ordered similar goods which they used in their daily lives and later buried with their dead. From the existing evidence I cannot determine whether the jar burial sites traded among themselves or other seafaring merchants brought the exotic ornaments and metal tools. There are no cultural remains which indicate jar burial cultures produced trade items e.g. iron implements, glass beads and then exchanged the goods among themselves or within a trade network.
CHAPTER IV

The Cultural Origin of the Southeast Asian Jar Burial Tradition

IV.1. The Exceptional Nature of Asian Jar Burials

The jar burial tradition is an exceptional burial form which spread widely throughout East and Southeast Asia with the earliest burials recovered in North China. Archaeologists have unearthed Yangshao jar burials along the middle and upper reaches of the Huanghe and Weihe and in south Henan and Hubei along the Hanhe. The Dahe Neolithic site located six kilometers northeast of Zhengzhou contained 62 child jar burials of which 60 belonged to the transitional phase between the Yangshao and Longshan cultures. Not only archaeological evidence but also historical documents indicate that North China has a long jar burial tradition. According to the Li Ji, the Emperor Shun, one of the virtuous rulers who supposedly governed China c.2300 B.C. ordered his people to bury children under the age of eight in pottery coffins.

3 "Li Chi" as compiled and edited by Juan Yuan in Shi-san-ching chu-shu (Nan-ch'ang fu hsueh 1815; photolithographically reprinted, Shanghai: Chin-chang-t'u-Shu-chu, 1926).
Though the Chinese traditions mention the practice of child jar burials, archaeologists have unearthed relatively few. To determine the incidence of jar burials in China, I compiled a list of Chinese burial sites as reported in Kaogu Xue Bao for the years 1981, 1982, 1983 and 1984. For this period the journal reports 36 burial sites of which four contained child jar burials: Baiyangcun, Yunnan; Tugutai and Yuanyangchi, Gansu; Beixin, Shandong. De Groot offers a possible explanation for the infrequent excavation of child jar burials. He mentions that in Amoy:

...the corpses of young children are placed in a jar or a wooden box. Then the corpse is buried in a shallow pit and earth heaped over it. Within a short time the dust returns to dust, or, as is very often the case, the remains are devoured by dogs and crows.⁴

He also cites other examples where many babies are never buried, but rather the urn or box is set in the open country and falls prey to birds and starving dogs.

While the inhabitants of North China performed jar burials for children under eight, they occasionally performed jar burials for adults too. On Map 1 I have located 38 Neolithic jar burial sites of which four contained adult jar burials: Jiangzhai, Shaanxi; Yudao, Shanxi; Qiugongcheng and Tumen, Henan. The occasional use of jar burials for adults represents a departure from normal burial practices. Usually the inhabitants of North China buried adults in a grave or tomb in either a

prone or supine position and reserved jar burials for children.

Jar burials were an unusual burial form not only in China but also in the Philippines. Fox claims that:

...[j]ar burial was not common (absent?) when pottery was first introduced into the Philippines during the Late Neolithic. Other types of burial which are associated with the early stone tool and pottery assemblages of the Late Neolithic included primary flexed burials and secondary "bundle" burials.5

He specifically cites the Duyong Cave which contains four distinct cultural sequences:

1- Early Metal Age jar burials.
2- Neolithic burial with a C-14 date of 4630±250 B.P.
3- Neolithic habitation level with a C-14 date of 5680±80 B.P.
4- A small flake and blade assemblage with a C-14 date of 7000±250 B.P.

Fox contends that:

[t]he single Neolithic burial is of considerable significance to Philippine prehistory. It is the first Early Neolithic burial, insofar as the writer knows, to be excavated in the Philippines and the first C-14 date for this period.6

The reconstructed skeleton reveals that "[t]he body was buried in a flexed position, face down, with arms and legs doubled beneath the body."7 Along the sides of the body Fox recovered one large polished stone adze and four

6 Ibid., p.54.
7 Ibid., p.62.
adzes made from the Giant Clam (*Tridacna gigas*). He also unearthed two perforated shell disks which were possible ear ornaments. Near the feet he found six whole *Arca* shells of which one had a round hole on one side and another shell was filled with lime. Fox believed that this shell served as a lime container for betel nut chewing. While Fox found shell tools and ornaments in association with the Neolithic burial, he unearthed no stone tools or pottery.

The archaeological record indicates that the flexed burial tradition continued in Palawan even after the first appearance of pottery. The Leta Leta Cave yielded a pottery assemblage which "provide[s] relevant data as to the probable characteristics of the earliest pottery of the Tabon Pottery Complex."8 Fox dates the Leta Leta Cave to "an early phase of the Late Neolithic *circa* 1000 to 1500 B.C., or earlier,"9 and claims that the Leta Leta Cave predates Chamber A Manunggul Cave. Fox recovered only a few jars which he believes "may not have been used for burial"10 although he excavated two, possibly three other types of burials:

1- Primary flexed burials;
2- "Bundle" burials of bones painted with hematite;
3- Flexed remains in a mound of hematite.

The presence of other burial types in association

8 Ibid., p.107
9 Ibid., p.178.
10 Ibid., p.178.
with a Late Neolithic pottery and stone tool assemblage indicates that the inhabitants of Palawan practised various types of burial after the introduction of pottery. With no archaeological evidence for jar burials before c.700 B.C., I assume that the sudden appearance of a highly developed burial tradition in Chamber A Manunggul Cave represents a cultural intrusion.

In Vietnam other forms of burial also existed before the inhabitants performed jar burials. In 1932 Etienne Patte unearthed 12 flexed burials in Da But which he dates to the Bacsonian period based upon "la présence de nombreuses haches à tranchant poli." Louis Bezacier claims that Da But best describes the various types of Bacsonian burials.

...Dans le même site, 'certains morts étaient accompagnés de leur hache et de leurs pendeloques; certains avaient été décharnés et probablement ligotes dans la station accroupie; d'autres avaient subi une combustion partielle, et (dans ce cas) les os avaient été regroupés et complétés comme pour simuler cette position accroupie; un crâne enfin, placé entre les jambes d'un accroupi, renfermait, telle une urne, des ossements de très jeune enfant. Les os ou les objets comme les haches, étaient parfois couverts d'ocre'.

Later in 1971 the Musée d'Histoire at Da But continued archaeological excavations. Besides Bacsonian type adzes, the archaeologists also recovered adzes polished on two surfaces and numerous ceramic sherds.

...Il ne faut pas oublier que les tessons de céramique étaient rares dans les grottes bacsoniennes et ceux qui ont été décrits ont pu appartenir à des périodes plus tardives que le Bacsonien.13

From the various shells recovered 0.70 meters below the surface, archaeologists obtained a radiocarbon date of 6095±60 B.P.14 Quyuhn Van is another Bacsonian site where archaeologists discovered 31 graves in a shell midden. The dead were buried in a forced crouched position along with grave goods of stone tools, shell ornaments and pottery. Archaeologists obtained two radiocarbon dates from marine shell samples of 4785±75 B.P. and 4730±75 B.P.15

Though the Bacsonian burial sites contained pottery, the inhabitants still did not perform jar burials. These first occur in the lower levels of Bau Tram and Long Thanh in association with an abundance of stone implements and ornaments and numerous pottery forms, "the most noticeable being the large jars."16 Vietnamese archaeologists identify Bau Tram and Long Thanh as early Sa-huỳnh presumably because both sites contain jar burials and stone implements with no evidence of bronze or iron artifacts. Chinh and Tien claim that:

[t]he most common characteristic of the Sa-huỳnh Culture is the burial jar. While not

13 Ha van Tan, op cit., p.120.
14 Ibid., p.120. I am not concerned here with the various problems associated with C-14 dates based on shell samples. Rather I am interested in the relative chronology of burial forms.
15 Ibid., p.120.
all the peoples in the Sa-huynh Culture buried their dead in jars, the abundance of jar burials indicates the popularity of the practice.17

IV.2. Hypotheses to Explain How the Jar Burial Tradition Entered Southeast Asia

Since Vietnam and the Philippines exhibit no archaeological evidence for a historical development of the jar burial tradition, I believe this highly developed death cult represents a cultural intrusion. Given the Late Neolithic date for the first appearance of the tradition, I can only assume that the tradition was linked with the actual movement of people: either the inhabitants of Vietnam and/or the Philippines went elsewhere and returned home with the jar burial tradition or outsiders brought the burial method with them. These two alternatives suggest several possibilities:

1- The most recent archaeological reports indicate that the jar burial sites in North China predate those from Vietnam and the Philippines. Perhaps small groups sailed from China and settled in Palawan and/or Vietnam c.700 B.C.

2- Various indigenous populations observed the jar burial tradition in other more remote regions. They brought the death cult home and integrated their own mortuary rites with the more exotic and unusual jar

17 Ibid., p.60.
burial tradition.

3- A "sea-going people" who traded within Southeast Asia carried the jar burial tradition with them. The various jar burial sites represent trading or mortuary outposts where the maritime people buried their dead.

I will address each possibility separately and eliminate the least likely first. The suggestion that the jar burial people are culturally related maritime people is only partially effective in explaining the Southeast Asian jar burial tradition. Solheim describes these maritime oriented people as Nusantao.

... the Early Nusantao were both fishermen and curious explorers. With their first primitive canoes they would have been able to travel far enough by water to contact the next group of fishermen living along their stretch of coast or on nearby islands, but probably no farther. These neighboring groups of fishermen spoke the same language, or at least shared a second language; and when they met at sea they would talk about sailing, fishing, and other matters of common interest. They would have heard about the next group of people farther down the coast or on the island just beyond the neighboring one, and in the usual boasting that goes on in such occasions, about the spectacular fishing area that their neighbors knew of quite some distance away. As better boats and outriggers were developed, fishermen could safely venture farther and stay away for many days at a time. The more curious and more adventuresome would go farther and return with more exciting stories and thus draw bigger audiences. Positive feedback from the audience would lead to longer trips, contact with people farther away, and the sharing of information on boats, sailing, tides, and currents, etc.

When fishermen have been at sea for a week or more, they are likely to have plenty of fish on board, but their supply of fresh water may be low. If they meet other fishermen who are only a short distance from home, they may well arrange to exchange some of their fish for water and possibly some fresh meat. And so it developed. Most men fished relatively close to
home, but some, inspired by their curiosity and reinforced by their audience at home, sailed farther and farther away on longer and longer trips and contacted others of a like mind from distant places. Many generations of this kind of fishing-exploring-trading probably produced groups of maritime-oriented people—perhaps even including full families like the Samal or Bajau of the not far distant past in the southern Philippines and eastern Indonesia. These early fishing-exploring trading people would have spent most of their lives on the sea, moving back and forth over specific areas of 200 to 300 or more kilometers, contacting other similar groups that traveled the next several hundred kilometers in varying directions. In addition, they would have traded locally with scattered, more land-oriented populations, exchanging products and materials locally in short supply that they had acquired through trade with some distant place for food. Besides this exchange of surpluses there would have been an exchange of knowledge, ideas, and genes.

In time these overlapping fisher-trader groups would have expanded throughout eastern Indonesia and the Philippines, and across to the mainland coast of China and Viet Nam. No one boat would sail over the total circuit, but there were probably some young men who left one group, joined the next, became acquainted with their territory, and moved on. A few probably travelled in this way until, in time, they went all the way around and back to their original group from the opposite direction. Some trade items probably also worked their way around the chain until they ultimately came to rest far from their point of origin. In this way, without major movements of people, a relatively informal, long-distance trade that also involved long-distance communication of ideas, knowledge, genes, and language (in the form of the trade language that people moving through this chain needed to talk to others) could have developed. This sort of trading system would help explain why, in the absence of migrations of people and in an area where there were many cultures, so many forms of stone artifacts, ornaments, patterns found on pottery, etc., were shared over such a wide territory.18

If for the sake of argument, I accept the hypothetical existence of the Nusantao which is totally undocumented, there are substantial objections to Solheim's explanation. The exchange of ideas and materials among the sea-going population of Southeast Asia perhaps explains why trade goods "ultimately came to rest far from their point of origin",\(^{19}\) but does not explain how the jar burial tradition first entered Southeast Asia. Solheim claims that the overlapping trade area of the Nusantao includes eastern Indonesia, the Philippines, Vietnam and the mainland coast of China. So far I have read no archaeological reports which locate Late Neolithic jar burial sites along coastal South China. And the only other regional jar burial sites are Chamber A Manunggul Cave and the three questionable sites of Bau Tram, Long Thanh and Niah Cave for which there is no historical precedent. If I accept that the "sudden appearance of jar burials is, in short, quite possibly a direct result of the coastal presence of the Nusantao sailor-traders,"\(^ {20}\) then from where in the overlapping trade network did the Nusantao obtain the jar burial idea? And furthermore if they carried the jar burial tradition as they expanded throughout the region, why are there so few Late Neolithic jar burial sites in Southeast Asia? I contend that the sudden appearance of jar burials is not the "direct result of the coastal presence

\(^ {19}\) Ibid., p.34.
\(^ {20}\) Ibid., p.47.
of the Nusantao sailor-traders..."21

Equally unlikely is the possibility that various indigenous Southeast Asian groups observed the jar burial tradition elsewhere and introduced the death cult once they returned home. I cannot imagine a situation in which Southeast Asians would change their burial traditions after random and/or infrequent visits to another region. Burial traditions form part of a complex socio-religious structure as is the case with the Jarai, one of the largest tribal groups in the Cham linguistic area of Vietnam.22 These people believe they live in constant communion with animistic spirits who are the guardians of Jarai society and religion. Any behavior contrary to tradition is an attack against the spirit world, and requires the tribesmen to make amends to escape punishment. The belief that the spirits can intervene in every aspect of daily life means the Jarai follow strict death and burial rituals to avoid possible displeasure from the spirits. The types of burials performed for different kinds of deaths, the mourning period, the tomb design, the closing ceremony: all these procedures follow a traditional pattern which identifies this "way of death" as Jarai. I would assume that any change in the Jarai burial tradition would involve major alterations in the socio-religious structure. I do not believe that occasional visits to other regions would

21 Ibid., p.47.
provide enough impetus to bring about such a monumental change.

A reasonable explanation for the first appearance of the jar burial tradition in Southeast Asia is that the death cult emanated from the region with an even earlier jar burial tradition. I suggest that in the first millennium B.C. small groups left China and eventually reached Palawan and/or Vietnam. The China Sea Pilot indicates that during the northeast monsoon or from November to March, a sailing vessel can reach Palawan in one season from the China coastline. Both the winds and currents favor a southward voyage (Map 5).

...[A]t the height of the season, in January, winds in the open waters of the south China sea and eastward of the Philippines are almost exclusively from between north and east, while in the Yellow sea the direction becomes more northerly, and over southern Japan is north-westerly. The frequency of winds from directions other than the prevailing one becomes greater with increasing latitude; the monsoon also becomes less steady, lighter, and more northerly towards the equator and among the islands of the Sulu and Celebes seas.²³

While the NE monsoon creates a southwesterly wind direction, the seasonal winds also influence the current flow.

The movement of the surface water over the South China Sea is related, in general, to the monsoons, though the relationship is complex and not direct. The main SW setting current during the NE monsoon (November to March) ... run[s] on the W side of the South China Sea....²⁴

The Ocean Passages for the World maps out a possible southern route for clipper ships sailing from Chinese ports such as Shanghai. First the vessels

...pass the Ma an lieh tao (Saddle group) and Video, the easternmost island of the Chusan archipelago, steer a good offshore course, passing outside the outer islands, giving them a good berth at night, and closing the land to obtain the position, by day, if no astronomical observations are obtained; for thick, hazy or rainy weather may always be expected.25

Southward along the China coast the ships steer for the Formosa straits, passing westward of the Formosa banks. From the Pescadores or the Formosa banks, the route leads to Cape Bolinao and down the Palawan passage.

During the Late Neolithic, only limited numbers sailed southward. I emphasize a small scale population movement because the current archaeological record indicates that there are at the most three or four jar burial sites in Southeast Asia: Chamber A Manunggul Cave, Long Thanh I, Bau Tram and Niah Cave. If vast numbers migrated, then there would have been more than a questionable four sites and the number of jars at each site would have been greater. A point of comparison is the jar burial people who arrived in south Korea—north Kyushu c.300 B.C. Erika Kaneko divides the Yayoi region into three sections: nuclear area, radiation area and marginal area. The nuclear area contains literally thousands of jar burials which archaeologists date to a short period from c.300 B.C.–c.A.D.300. From this

nuclear area recent research has shown that the Yayoi horizon extended northeast "although belatedly and considerably diluted." The vast number of jar burials in conjunction with a widespread cultural base suggests that Kyushu experienced large scale migrations while the single Late Neolithic jar burial in Tabon and the one or possibly two sites in central Vietnam imply the arrival of small numbers.

Why these people who performed jar burials originally left their homeland is impossible to determine. Suffice it to say, they left for one reason or another: possibly drought and subsequent crop failure; internal tribal conflicts; or the inevitable devastation from the endless warfare among competing states in China. The period in question marks the collapse of the Western Zhou empire and the transfer of the capital to Luoyang in c.770 B.C. The removal of the capital demonstrated that the Zhou royal house no longer possessed the power to control the rulers of the various states of North China. Li Xueqin describes the Eastern Zhou era as "the longest period of disunion in the whole of Chinese history...." which can be broadly divided into two stages: the Spring and Autumn Annals (722-481 B.C.) and the Warring States (476-256 B.C.) As the competing lords became increasingly powerful, they swallowed up the smaller

states, and "Seven Strong Men" emerged: Qi, Chu, Yan, Han, Zhao, Wei and Qin. The competitive and combative spirit of the period led to the overall confusion of the times and the eventual division of China. In the Warring States period the turmoil increased as noted by Liu Xiang (c.77-6 B.C.):

Of ten thousand chariot states there were seven, and of one thousand chariot states there were five. They were antagonistic toward each other in competing for power, developing into the Warring States. They were greedy and shameless. They competed without satiety. The states differed in their politics and in their teachings, each making their own decisions. It can be said that there was no Son of Heaven above and there were no local lords down below. Everything was achieved through physical force and the victorious was the noble. Military activities were incessant and deceit and falsehoods came hand in hand.\footnote{Ibid., p.7.}

Whether the people left for political, cultural or economic reasons remains unknown. It is sufficient to suggest that a small population left China c.700 B.C. and carried with them their religious beliefs to Southeast Asia. A comparison of the jar burial tradition in Southeast Asia with the tradition in North China suggests that in the process of moving the people altered the basic tenets of the jar burial cult. This initial observation is based upon the fact that there are four major differences in the jar burial traditions of the separate regions:

1- The vast majority of jar burials in North China contained child remains while the Southeast Asian inhumations included both adults and children.
2- The archaeological records indicate that the inhabitants of North China infrequently performed jar burials which differs from the widespread use of jar burials in Palawan.

3- The rather casual disposal of jar burials in North China contrasts with the elaborate methods used to place jar burials in the Tabon caves.

4- The Chinese often used discarded cooking vessels to bury the dead and rarely included any funerary objects in the jars, while those who performed jar burials in Chamber A Manunggul Cave provided an elaborate burial assemblage which included decorated burial jars and pottery in association with other artifacts.

IV.3. Explanation for Change in Jar Burial Tradition Between China and Southeast Asia

Though these differences suggest that there is little or no relationship between the jar burial traditions of North China and Southeast Asia, I contend that this assumption is not correct. Rather I propose that a more complete analysis of the beliefs associated with the jar burial traditions of North China will explain the variations. When the people sailed to Southeast Asia, they brought with them a developed burial tradition which prescribed various burial methods for different types of deaths. The jar burial tradition formed part of their complex death ritual and was
performed only under certain conditions. I believe that
the burial traditions did not alter, but rather the
circumstances under which they were performed changed.

As I previously mentioned the inhabitants of North
China performed jar burials for children and sometimes
adults. The specific use of jar burials for only
particular individuals suggests that in some way their
deaths were viewed differently. De Groot refers to the
special treatment of certain people whose graves have no
fengshui which he describes as:

...the beneficial influences of Nature, which
every one is sure to concentrate upon his
graves, are thus used to denote the graves
themselves. This fact, though insignificant at
first sight, is yet of some interest, as
showing that the people are wont to connect
Fung-shui so inseparably with their burial
places, that a grave without some Fung-shui is
to them a thing unimaginable.\(^29\)

De Groot claims that fengshui theories do not exist
for children.

...Their corpses are placed in a jar or a poor
wooden box ... which a workman unceremoniously
carries on his shoulder, or in some other way,
to the open country, together with a hoe to dig
the grave pit. No relations escort him on his
way. At best the sorrowing mother sees him out
into the street, giving vent to her grief by
piteous wailing, and loudly protesting against
her child's leaving her.\(^30\)

The Li Ji also records the slipshod burial of non-
adults.

Confucius said, ... 'In sacrificing to one
who has died prematurely, there are (only) the
satisfying offerings, for he was not full-
grown. To sacrifice to a full-grown man, for

vol. (Leyden: E.J. Brill, 1897) vol.3: 1074.

\(^30\) Ibid., p.1075.
whom there have been the funeral rites without a representative, would be to treat him as if he had died prematurely. 31

Elsewhere in the Li Ji discussions center around the appropriate form of burial for boys who had died prematurely.

The people of Lu wished to bury the lad Wang I not as one who had died prematurely, and asked Kung-ni about the point. He said, 'As he was able to bear his shield and spear in the defence of our altars, may you not do as you wish, and bury him as one who has not died prematurely?' 32

The same classic narrates the following incident in which the Sage discusses the custom of burying children between the ages of eight and twelve.

Tseng-tsze asked, 'Children dying prematurely, between eight and eleven, should be buried in the garden in a brick grave, and carried thither on a contrivance serving the purpose of a carriage, the place being near; but now if the grave is chosen at a distance, what do you say about their being buried there?'

Confucius said, 'I have heard this account from Lao Tan: — "Formerly," he said, "the recorder Yi had a son who died thus prematurely, and the grave was distant. The duke of Shao said to him, 'Why not shroud and coffin him in your palace?' The recorder said, 'Dare I do so?' The duke of Shao, spoke about it to the duke of Kau who said, 'Why may it not be done?' and the recorder did it. The practice of coffins for boys who have died so prematurely, and shrouding them, began with the recorder Yi." 33

The archaeological record also indicates that the children under eight received cursory burials. At Banpo

32 Ibid.,  p.185.
Chinese archaeologists recovered pottery coffins which contained the bones of babies and small children. Buried in the settlement near the houses, the pottery coffins consisted of ordinary cooking vessels. A large mouthed and flat bottomed vessel formed the base which was covered with a perforated bo bowl and then topped with a wan bowl. The offhand use of discarded cooking vessels for jar burials suggests that the inhabitants of China placed little importance on a child's death. Eberhard cites several historical examples which demonstrate the expendability of children. The Yao often drowned unwanted children.

...[T]here are many reports telling that the Yao families allowed only three of their children to live while all further children, regardless of their sex, were drowned. This institution has a very well circumscribed distribution from early times to almost present-time.34

Another form of infanticide includes the exclusive killing of girls which occurs "almost universally in the entire area of the high-Chinese culture."35 This represents a specialized development of culture where women are not essential in economic production, but cause losses in marriage exchanges. Other types of child deaths include child exposure and infanticide for magical reasons.

While the inhabitants of North China performed child jar burials, they also performed adult jar burials.

De Groot noted that:

...graves in the selection of which no Fung-shui calculations have had part or lot, exist in considerable numbers. They are those of forlorn people without offspring, on whose last resting places nobody's fate depends, and whom benevolent men, anxious to collect a store of merit, have committed to the earth in urns or poor coffins, without much ceremony.36

Not only adults with no offspring, but also previously buried relatives whose fengshui has suddenly disappeared received jar burials.

When the Fung-shui of a grave is believed to be detrimental to the fortunes of the family, the exhumation is seldom long delayed .... The reasoning is, that an ancestor lying in a grave beyond the reach of the good influences of Nature is entirely at the mercy of evil.... No doubt then his wrath will descend upon his posterity, unless he be forthwith delivered by them from his painful position. To dwell in a bad grave is but one degree worse than not to be buried at all.

As a matter of course, a long time must elapse before it can be held to be convincingly proved that the Fung-shui of a grave is bad, inactive or dead. Hence it seldom occurs that a corpse is disinterred before it has become a skeleton and the coffin is too decayed to be used for the second grave.

Disinterment being once resolved upon, an auspicious day is selected for the work.... When this day arrives, some grave-diggers, under the guidance of a few members of the family and the Fung-shui professor of its choice, open the grave and then the coffin.... During these proceedings, an open umbrella belonging to the family stands at the head of the pit on behalf of the soul, should it desire to take shelter underneath.... Finally all the bones are placed in their natural order in a high, large-mouthed earthenware jar, the skull, which comes last, being first wrapped up in paper daubed with the rough outlines of a mouth, nose and eyes. For the better preservation of the bones, the jar is not unfrequently filled up with bits of charcoal and closed with an earthen pan, this pan being fastened into the mouth by means of lime.

Should the bones, when disinterred, be solid and hard, and none of them missing, and the grave, moreover, bear no vestiges of termites, the family generally come to the conclusion that the Fung-shui is by no means so bad as they have been led to believe from the professor's description. Pained at the idea of having to give up a grave so dearly bought, they bury the jar in the same spot, if they can succeed in persuading the professor into their opinion, selecting for the purpose a felicitous day and hour with the usual Chinese foresight. But in by far the most cases another grave is sought for, and the old ground sold. This sale does not necessarily cause a pecuniary loss, for, as the geomantic doctrines affirm that a Fung-shui, though disadvantageous to one, may be extremely beneficial to another, often eager buyers are easily found.37

Eberhard also discusses a related custom of bone washing. After a preliminary burial the bones are removed from the tomb, cleaned and then buried for a second time. Among the Hakka they perform the second burial in an urn, and Eberhard claims that this custom is widely spread in Guangdong.

"Bone washing" and secondary burial are attested for early periods and over almost all of southern China and adjacent areas. It seems to me that this custom should be further broken down into sub-types. One of these sub-types, for instance, has the bone-washing, but not as a custom belonging to a secondary funeral: when someone fell ill, the bones of the ancestors were exhumed and washed. This was, clearly, a magic ritual, but unfortunately no report indicates whether bone washing was supposed to please the ancestors and thereby to engage their help, or whether it was designed to annoy them and thereby force them to take away the illness. Therefore, so far nothing can be said about the sphere of belonging of this custom. Besides, tombs of bones are known for the Hakka in Hainan.... Burial of bones was probably alluded to also in most cases of high-Chinese reports on repeated funerals.... The reason for a repeated burial in the high-culture was usually that at the first burial the ritual had

37 Ibid., pp.1057-1058.
been performed incorrectly or that the coffin had been exposed to view.\textsuperscript{38}

The Jarai from the Darlac plateau in Vietnam also perform jar burials under adverse burial conditions. When a family experiences serious illness, they often consult a sorcerer who might determine that their problems stem from a deceased family member who is not satisfied with his/her tomb. A shaft into the tomb mound is dug just large enough to remove the coffin. Then someone descends into the hold to determine why the deceased is so disturbed. The coffin is opened and the remains placed in a large jar which is buried at the head of the tomb. The tribe also performs adult jar burials under other extenuating circumstances. If a Jarai dies far from home and the family cannot recover the body, the family buries a large empty jar instead of the deceased.

The sudden appearance of jar burials in Southeast Asia also denotes unusual death circumstances. When the small population groups arrived in Palawan and/or Vietnam, they brought with them a highly complex set of death rituals which differentiated between various types of death. Usually the people buried adults in pit graves and children in burial jars, but after they arrived they began to inter both children and adults in burials jars. I believe that the radical change in burial practices reflects a change in burial conditions, not burial traditions. For the peoples of China it is extremely important to return home for a proper burial. Without a

\textsuperscript{38} Eberhard, \textit{op. cit.}, p.106.
traditional funeral in their ancestral homeland, there is no one responsible for the physical upkeep of the grave or the continuity of necessary rituals.

After all, it is obvious enough why the Chinese throughout all ages have displayed such partiality for burying their dead, and being themselves buried, in the same ground with their ancestors. Is not the interring together of children of the same stock an inseparable counterpart of the clan life which the nation has always regarded as the chief corner stone of its social organisation? Has it not been practised since the dawn of time, and is not posterity therefore obliged to adhere to it as firmly as to any other institution of the holy ancients? Moreover, is it not a sacred duty of wives and children to have their bodies and souls re-united after death with those whom the moral laws of all ages have taught them to follow and serve with the most absolute submission and devotion, both in this life and the life hereafter? Last not least, is it not an invaluable advantage to every dead man to rest in the proximity of his living offspring, who, by taking good care of his grave, greatly benefit his names which dwell therein, and who regularly feed and clothe the same by means of sacrifice?39

Thousands of miles from China these people had no immediate hope of ever returning home for a proper funeral. Perhaps they hoped that someday a relative would carry their mortal remains back to their ancestral village.

The native books are full of evidence that the conveying of the mortal remains of persons who have died elsewhere, to the place where they were born and their ancestors were buried, has prevailed in China throughout all ages. In the Li ki ... it is related of Kiang Shang or T'ai Kung, the first ruler of the principality of Ts'î with which he was invested by the founder of the Cheu dynasty: 'After he had been invested with his state and had settled in (its capital) Ying-khiu, he and his descendants for

five generations were taken back to Cheu (their ancestral home), to be buried there. A man of higher order has said: 'For music we must use that of the persons from whom we are descended, and in ceremonies we should not forget those to whom we trace our origin.' And the ancients had a saying that a dying fox turns its head towards the hill (where it was whelped). Such things flow forth from feelings which are human.  

Whether the people hoped to return home in jars or whether they performed jar burials because they could not return home: either circumstance required a change in traditional burial practices. Just the act of moving away from the ancestral homeland made it necessary to perform jar burials for both children and adults. Such a hypothesis helps to explain the anomalies that surround the Late Neolithic jar burials in Southeast Asia. Before c.700 B.C. there is no archaeological evidence for Southeast Asian jar burials other than the questionable data from Vietnam and Tabon. Not only is there no historical precedent for jar burials, but also their initial appearance occurs in a fully developed form. When Fox entered Chamber A Manunggul Cave, he viewed a striking jar burial assemblage.

Seventy-eight jars, jar covers, and smaller earthenware vessels were found on the surface and in the subsurface levels of this chamber. The range of forms and designs is remarkable and to the writer, at least, presents a clear example of a funerary pottery; that is, vessels which for the most part were potted specifically for burial and ritual purposes.

Fox believed that the Late Neolithic witnessed movements into Palawan which brought a decorated funerary

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40 Ibid., p.834.
41 Fox, op. cit., p.112.
pottery and a developed jar burial complex. By movements he implied "small-scale movements by boat of probably kin-oriented groups along the coasts bordering the South China Sea basin." 42 Though small scale movements undoubtedly occurred along the South China Sea coastlines, there is no archaeological evidence for jar burials in this region except for Palawan. This phenomenon suggests that the jar burial tradition came from outside the South China Sea basin and points directly to the early jar burial tradition of North China.

IV.4. Explanation for Change in Jar Burial Tradition

Between China and South Korea-North Kyushu

More conclusive archaeological and historical evidence connects the jar burial tradition of North China with the jar burial tradition of south Korea-north Kyushu which emerged c.300 B.C. Chinese history records the devastation of the Warring States period and the eventual triumph of the Qin armies. Rodzinski claims that:

[t]he ensuing period of Warring States was an era of perhaps the greatest strife in Chinese history up to, but not including, the 20th century. This was a cruel, brutal struggle, with continuous conquests and aggression in which only the 'fittest' could survive.... Large masses of infantry were now employed, while the chariots of the earlier era were put aside. The weapons were of iron and since the 5th century a considerable use was

42 Ibid., p.162.
made of cavalry.... There was a manifold increase in the size of armies and undoubtedly a proportionate, if not still greater, increase in the suffering of the population.  

Systematically the Qin vanquished the six opposing states in the east and established a centralized government. To maintain control and administer the new state, the Qin instituted internal reforms which they enforced with ruthless despatch.

One of the weapons used effectively by the Ch'in was cruelty and terror on a mass scale. While there is an undoubted tendency in Chinese sources to use exaggerated round figures, there is little doubt that the figures relating to tens of thousands of enemy heads cut off by the Ch'in armies are close to the truth. The Ch'in soldiers were paid special bonuses on the basis of the heads which they presented and decapitated all within reach, both killed and wounded. Thus the notorious massacre in 260 B.C. at Ch'ang-ping of the entire Chao army which had previously surrendered - all 400,000 were supposedly buried alive - was in line with Ch'in practice. The Ch'in were the Assyrians of East Asia, although they left no bas-reliefs to boast of their sanguinary achievements. They well deserved the name of 'the ferocious beast of Ch'in', as a minister of Ch'u called them.  

The political turmoil of the Warring States period and the ensuing social crises of the 15 year Qin rule forced thousands of people living in China to flee and seek refuge elsewhere. Their flight led from Heibei to Liaoning and down the Liaoding Peninsula. From there they sailed to south Korea-north Kyushu with a possible intermediary stop at Tsushima Island. The Wei Ji describes a similar voyage taken by the Chinese in the

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44 Ibid., p.32.
A.D. third century. They left Lelang or Daifang in north Korea and sailed south or east. From south Korea they passed over the sea to Tsushima and over another sea to Iki and at last landed on Matsura in Kyushu. Mizuno, Higuchi and Okazaki claim that "[t]his was the usual route between the continent and Japan since the remotest times."45

Along this route the continental people travelled and with them they brought new technologies which precipitated the remarkable changes which characterize the Yayoi period.

...During the Yayoi period, the transition from food gathering to food producing occurred simultaneously with the transition from stone technology to metallurgy. Also, the foundation of the ancient Japanese state was laid as individual small local primitive communities were unified and as specialization of labor and social stratification developed. It is interesting to note that these changes required several thousands years in Southwest Asia and China, but that in the Japanese archipelago they occurred more rapidly.46

The continental influx brought not only new technologies but also different burial traditions. The Jomon period is characterized by supine and flexed burials in pit graves while the Yayoi period witnessed the introduction of jar burials, stone cists and dolmens. Kidder states that "[c]ist graves were introduced from Korea and quite likely represented an upper-class mode of burial".47 These types of graves dotted the islands of

47 Kidder, op. cit., p.105.
Korea and Japan especially Tsushima Island. The stone cist graves date to the Early and Middle Yayoi periods while the "jar burials perpetuated themselves in a long tradition that started in Early Yayoi and did not cease in Kyushu until about the time Buddhism was introduced in the sixth century A.D." Other archaeologists have also noted the simultaneous practice of several continental burial traditions. Dairobu Harada reports that the Ishigasaki burial site contained three types of burials: pit, jar and dolmen. Jar No. 6 was buried at a 30° variant; Jar No. 14 was under a dolmen, and Jar No. 22 was inside a cairn. Harada not only commented on the combination of various burial forms but also noted a variety of jar shapes. Jar No. 6 consisted of a large jar with a bowl cover while Jar No. 22 was a single inverted jar which rested upside down in clay. Kaneko also remarks on the use of single and combined pottery vessels as burial jars. From the Kashimayama site report he concluded that both single and combined vessels were used as burial jars, and though crock type vessels predominated, "[v]arious pottery types serve as containers."

I contend that during the Warring States period thousands fled China and settled in south Korea-north Kyushu. Along with their new technologies, they brought

48 Ibid., p.106.
50 Kaneko, op. cit., p.7.
the jar burial tradition of North China. Kaneko claims that "[t]he introduction of the idea and practice of jar burial into our nuclear area from somewhere in China is not to be doubted...."; yet why in the process of transmission did the burial tradition change? The burial tradition of North China reserves jar burials for children and the occasional adult while the successive waves of immigrants performed widespread jar burials for both children and adults. I believe that when the immigrants settled in south Korea-north Kyushu, they did not change the basic tenets of the jar burial tradition, but rather the conditions for the use of jar burials changed. As with the earlier settlers of Southeast Asia, the people faced similar death related problems which resulted from moving away from their ancestral homeland. The actual movement from China to south Korea-north Kyushu meant that they could no longer perform the usual continental burial methods. With no immediate hope of returning home for a traditional funeral, the ancient rituals required the homeless to perform jar burials for both adults and children. Their willingness to use any pottery form to inter the dead finds its counterpart in the use of a variety of burial jar forms in North China. The excavation report for the Dahe Neolithic site near Zhengzhou depicts 10 of the 62 unearthed burial jars, and all vary in shape and size.

51 Ibid., p. 11.
also exists at the Guanmiaoshan Neolithic site, Hubei.\textsuperscript{53} Archaeologists recovered over 100 jar burials among the third period remains and noted each burial jar consisted of two parts: a crudely formed round bottomed pottery jar topped with a lid in the form of a basin, a cauldron or a bowl.

While the burial jar played only a functional role in the jar burial tradition, the burial location of the jars assumed paramount importance. Tejiro Mori contends that the cemeteries are always situated on top of a terrace or a hill. Andersson also observed a similar situation in North China where he located five Banshan burial sites on one of the highest hills in the district. He believed that the inhabitants carried the deceased 10 kilometers or more from their villages and up steep paths so that the deceased could overlook the place where they had lived and grown old. Kidder, on the other hand, offers a more pragmatic interpretation as to why cemeteries are situated on hill tops. He believes that the Yayoi used higher land for their burial grounds because the people inhabited the lower regions and needed the land for agriculture. Though Kidder presents a reasonable explanation, the archaeological evidence from the Philippines also supports the importance of jar burial location. Whether the inhabitants placed the jars along the ledges of limestone caves or buried them in

open air sites, the burial location invariably overlooked the sea. Perhaps the elevated site or the close proximity to the sea encouraged the soul of the deceased to speed homeward.

Not only is burial location important, but also the grouping of burial jars. Again Mori notes that:

The jar-burials are in most cases found in a group.... Sometimes we are able to point out a fairly large number of coffins among a group whose orientation, buried depth and inclination of coffins are almost uniform, so much so that it suggests that they form a family tomb, probably of the same blood.\textsuperscript{54}

These conditions match the burial practices of ancient China. The custom of living together in clans, each composed of the descendants of one family, virtually turned a village burial grounds into a family graveyard.

[...]t is certainly not unnatural that it early became a custom in China to bury sons by the side of their parents, as being their property, and that the same rule was followed with regard to daughters, if the parental power over them had not ceded, by marriage, to a husband, or a husband’s parents.\textsuperscript{55}

\textbf{IV.5. Expansion of the Jar Burial Tradition in South Korea-North Kyushu and Elsewhere in Southeast Asia}

While the jar burial tradition expanded in south Korea-north Kyushu from c.300 B.C.-c.A.D.300, a similar


phenomenon occurred elsewhere in Southeast Asia. The archaeological record indicates that the expansion of the jar burial tradition in the two separate regions represents isolated developments. In fact current reports suggest that successive groups which fled the political upheaval of China c.300 B.C. never settled farther south than Kyushu. Kanaseki and Sahara contend that the "Yayoi culture spread over all the Japanese islands except the Ryukyus and Hokkaido. The southern boundary of the culture lay at the Satsunan Islands."56 Though the Ryukyu Islands form convenient stepping stones from Kyushu to Taiwan, there is no indication that the Yayoi jar burial tradition extended southward. Erika Kaneko describes the multiple disposal method of the dead in the Ryukyus and divides the burial practice into three stages. The first phase consists of a decarnification of the body caused by exposure in the jungle, a cave, or a tomb. The second phase involves bone washing, the reassembling of the cleansed bones in a bone jar and the placing of the jar in a cave, a cliff ledge or a tomb. The third and final phase occurs 33 years after death when the bones from the jar are emptied onto a general platform containing other ancestral bones. On the Yonaguni Island in the Yaeyama archipelago, Kokubu and Kaneko noted several rock shelters which contained burials.

...[N]ear the abandoned Shimanaka settlement is another rock-shelter burial area. At the

56 Kanaseki and Sahara, op. cit., p.16.
south-western extremity of this district, the Tabaru river in winding its way northward forms a natural barrier. There we found at several points, but for the excessive vegetation, in sight of each other broken burial jars in association with human remains and one completely preserved burial urn filled with human bones, jars and urns being of the *panari* type pottery....

Kaneko describes two types of bone jars: one typologically similar to the *waga* cooking jar of the Yami of Botel Tobago; and the other similar to a jar excavated by Dr. Kano Tadao in Imoroud, Botel Tobago. The similarity in jar form and firing technique also recalls round bottomed and prehistoric cooking vessel found in the Yaeyama Islands.

...The variety with the ear-shaped horizontal lugs is also known from the prehistoric inventory of East Formosa.... Similar vessels can be seen among the finds from Hsiao-liu-chu. It must be emphasized that this conspicuous type of pottery has never been found in Japan.

Kaneko also notes other cultural relationships with islands farther south.

...[W]e again climbed up on the plateau and after walking several hundred metres came to a cairn of loosely piled coral stones in the middle of a field. The cairn is identical with the one illustrating Solheim's account of Philippine prehistory.... Two farmers who had sheltered us during a violent downpour in their field hut, named the family to which this grave belonged, but were uncertain about the exact relationship between the present head of the family and the remains contained in the cairn. The cairn being, however, only a stone's throw from their field hut, they remembered that the site was still annually cleaned and visited at the occasion of the 'ancestor's New Year' (16th day of the first lunar month). On that day the

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58 Ibid., p.91.
whole family assembles before the cleaned grave and partakes of a meal. After the meal, the shamisen is played and songs are sung to entertain the departed ancestors. We were allowed to remove a few top stones of the cairn and have a brief glance at a large brown bone jar of Chinese provenience, filled with bones, around which the coral stones were built up to a cone. When we carefully replaced the stones, one of the farmers remarked: 'Superstitious people believe that exposure of ancestral bones to the rain will provoke the wrath of the ancestors'.

Subsequently, we encountered several more of these cairns, in all instances similar in appearance, and situated in the fields; they showed signs of recent visits and could without exception be identified as to owner. We suspect that these cairns were used until very recently, or may, in some instances, be used even now, by families with low economic status. We were unable to confirm this beyond doubt for lack of time.59

Just as Kaneko observed no southward expansion of the Yayoi cultural horizon, Fox noted that the Developed Metal Age jar burial sites in Palawan exhibit:

... no unique horizon markers either in the pottery or associated artifacts which would indicate new and extensive movements into the area.... Certainly, there must have been new movements of people into Palawan and the Philippines during the Developed Metal Age, increasing external contacts, and possibly the beginnings of actual external trade as Beyer has stressed. But these are strangely not reflected in the artifactual assemblages of Tadyaw Cave and other caves of the same period. More extensive movements of people into Palawan, as indicated by changes in the types of artifacts, seemed to have taken place during the Late Neolithic and the Early Metal Age.60

Fox found few striking innovations in pottery in the Tadyaw Cave. Rather he observed certain stylistic trends such as simplicity of design and elaboration of particular ceramic forms. A specific example is the

59 Ibid., p.91-92.
60 Fox, op. cit., pp.155-156.
great number and variety of trunconical covers and the absence of paddle decorated vessels. Fox examined tens of thousands of sherds from Tadyaw Cave and only a few had incised or paddle impressed designs. Thus he concludes that:

[t]he archaeological data presently available would strongly suggest that these stylistic changes were local ceramic trends which occurred primarily during the Developed Metal Age. The associated artifacts - types of ornaments in stone and glass and metal implements in bronze as well as some of the pottery types - found in Tadyaw Cave also occur in the Early Metal Age cave sites.61

Fox's observation that the Developed Metal Age witnessed no new population movements into Palawan suggests that the subsequent expansion of the jar burial tradition reflects an indigenous development.

IV.6. Archaeological Data Problems for Palawan and Vietnam

Two possible regions from which the jar burial tradition could have emanated are Palawan and Vietnam though both face archaeological data problems. Fox describes his first view of Chamber A Manunggul Cave:

...as dramatic as its setting; numerous large jars and covers, smaller vessels, skulls and portions of painted human bones scattered over the surface of the cave.... Many of the vessels were either perfect, in nearly perfect condition, or had merely collapsed in their original position.62

61 Ibid., p.155.
Not from inside the perfect or nearly perfect burial jars, but rather from the subsurface level of the cave, Fox obtained the "[e]xcellent charcoal samples, apparently from the ritual fires...." With no clear association between burial jars and charcoal, Fox cannot prove that the inhabitants of Palawan built fires in Chamber A Manunggul Cave before, after or at the same time as they performed jar burials.

Though the chronological relationship between charcoal samples and burial jars is questionable, the radiocarbon dates of 2840±80 B.P. and 2660±B.P. seem reasonable when analyzed in terms of other jar burial assemblages. Fox prepared a detailed comparative study of cultural assemblages from six jar burial caves which span the Late Neolithic to the Developed Metal Age. Chamber A Manunggul Cave presents a highly distinctive assemblage with decorated and painted pottery in association with shell and jade ornaments. In comparison Chamber B yielded "a Developed Metal Age assemblage of artifacts" which includes plain pottery in association with iron fragments and numerous glass ornaments and carnelian beads. Though Fox originally believed that the plain pottery of Chamber B was earlier than the decorated vessels of Chamber A, he obtained a radiocarbon date of 2140±100 B.P. for Chamber B. The later date for a jar burial assemblage with iron suggests that the Late Neolithic date for a jar burial assemblage with shell and

63 Ibid., p.111.
64 Ibid., p.117.
jade ornaments and no metal or glass artifacts is reasonable.

While the Tabon Cave report contains chronological problems, the Vietnamese archaeological reports also exhibit inconsistencies in chronology and data. Archaeologists have discovered two proto-Sa-huynh sites at Long Thanh I and Bau Tram and have obtained two Long Thanh I radiocarbon dates of 3370±40 B.P. (1.6m.) and 2875±60 B.P. (0.6m.) respectively. The archaeological report notes the stratigraphical location of the charcoal samples, but not where the charcoal was found in relation to the burial jars. Whether the charcoal came from inside the burial jars affects the credibility of the entire report.

Other information gaps plague the Vietnamese data. So far I have been unable to determine whether both Long Thanh I and Bau Tram contain burial jars. Chinh and Tien contend that the proto-Sa-huynh culture occurs in the lower layer of Bau Tram and Long Thanh. They describe a highly distinctive assemblage of artifacts which includes an abundance of stone implements and ornaments as well as various pottery types, "the most noticeable being the large jars."65 Though Chinh and Tien claim that "[t]he most common characteristic of the Sa-huynh Culture is the jar burial,"66 they do not specify whether the "large jars" are burial jars and whether both sites contained these vessels. The same vagueness surrounds the Ha van

65 Chinh and Tien, op. cit., p.59.
66 Ibid, p.60.
Tan report. He states that "archaeologists have discovered pre-Sa Huynh habitats and jar burials at Long Thanh," but does not mention Bau Tram or describe the burial jars. He finds the pottery inside the burial jars "very well finished and finely decorated." He also describes the other pottery types and even provides drawings while the burial jars which supposedly characterize the Sa-huynh culture remain unreported.

Without more definitive information, I cannot determine whether both Long Thanh and Bau Tram contained burial jars nor can I surmise the jar contents or the numbers unearthed. Such information gaps present numerous problems if I am to specify the region from which the jar burial tradition emanated, namely:

1- If the Long Thanh I radiocarbon samples represent cultural intrusions or were contaminated or unrelated to the burial jars themselves, then Vietnam does not have the earliest jar burials in Southeast Asia.

2- If Long Thanh I contained only one or two jar burials and the burials were child inhumations, then Long Thanh does not belong to the Southeast Asian jar burial tradition.

3- If Bau Tram does not contain burial jars, then Vietnam has only one Late Neolithic jar burial site with

67 Ha van Tan, "Prehistoric Pottery in Vietnam and Its Relationships with Southeast Asia," (paper presented at the 12th Indo-Pacific Prehistory Association, Penablanca, Philippines, 1985), p.8. Ha van Tan uses the term pre-Sa-huynh while other Vietnamese archaeologists describe the same archaeological data as proto-Sa-huynh. I assume that this discrepancy reflects a difference in terminology not concept.

68 Ibid., p.8.
two questionable radiocarbon dates. This phenomenon makes Long Thanh a cultural anomaly with no chronological continuity with the later Sa-huỳnh urn fields.

I propose that until Vietnamese archaeologists re-investigate and clarify the proto-Sa-huỳnh data, that these sites should be dropped from the analysis. This means that for me the Sa-huỳnh jar burial tradition is a Metal Age phenomenon:

...caractérisée par divers éléments bien connus tels que les sépultures à jarres cylindro-ovoides, les outils en fer, les objets de parure en pierres dures ou en verre...69

In comparison the Tabon jar burial caves present an uninterrupted chronological sequence from the Late Neolithic into the present. With such a well established progression, I contend that Palawan not Vietnam served as the cultural base from which the jar burial tradition developed and expanded.

That cultural and/or trade relationships existed between Palawan and Vietnam is a well documented fact. The trunconical lid which covers the Sa-huỳnh burial jar first appears in Chamber A Manunggul Cave. The often cited lingling-o ear ornament also appears on both sides of the South China Sea. Loofs-Wissowa traces the origin of the ear ornament back to the Phung Nguyen culture in North Vietnam which dates to c.2500 B.C.70 Though Fox

69 Ha van Tan, "Nouvelles recherches..., " p.136.
found no lingling-os in Late Neolithic jar burial sites, he noted their presence at Duyong, Uyaw, Tabon, Guri and Batu Puti caves where he also unearthed early metals. He describes the lingling-o as a diagnostic ornament of the Early Metal jar burial sites which he dates to a short time period of c.700 B.C.-c.200 B.C. Vietnamese archaeologists also recovered lingling-o ear ornaments from the Metal Age jar burial sites of Sa-huynh and Phu Hoa. While lingling-os characterize Metal Age jar burial sites in both Vietnam and Palawan, Fox noted their conspicuous absence in the Developed Metal Age jar burial caves of Tadyaw and Pagayona. Perhaps the absence of lingling-os in Palawan corresponds to a cultural break between the two regions.

IV.6. A Possible Explanation for a Cultural Break

History offers a possible explanation for the interruption of trade and cultural relations between Vietnam and Palawan. G. Coedes claims that Vietnam witnessed the first introduction of Indian culture c.A.D. second century.\textsuperscript{71} The propagators of the new culture brought a specific philosophical and religious doctrine which the indigenes readily adopted.

In order to understand how it was that Indian culture spread with such ease and such rapidity in Indochina and throughout South East Asia in general, it must be remembered that it contained within it many pre-Aryan elements and many survivals of a basic culture common to all the monsoon area of Asia. The Indo-chinese do not seem to have reacted towards Indian influence as if they were being confronted with an alien culture, and they 'may not always have been aware of changing their religion when adopting that of India'.

The political outcome of the spread of the Brahmano-Buddhist culture was that several Indian patterned states emerged in the first centuries after Christ:

1- Champa, on the east coast of the peninsula, between the mountain spur of Hoanh-son and the Mekong delta.

2- Fu-nan, in the Mekong delta, later succeeded by Chen-la and the kingdom of Kambuja, which included the basin of the Great Lake as well as the Mekong delta in its territory.

3- Dvaravati, in the southern part of the Menam valley.

4- Srikshetra, in the lower valley of the Irrawaddy.

Though little is known about these early kingdoms, the fact remains that the east coast of Vietnam and the Mekong delta adopted the Indian way of life c.A.D.second century.

When a kingdom of the Indian type was established, several local groups, each with its own tutelary deity or god of the soil, were brought together under the authority of a

\[72\] Ibid., p.52.
\[73\] Ibid., p.53.
single ruler, who may have been either an Indian or an Indianized native. Usually this was accompanied by the inauguration of a cult devoted to an Indian god closely associated with the person of the king, and symbolizing the unity of the kingdom, the place of worship being a natural or an artificial mountain. This custom, found in conjunction with the founding of a new kingdom or a new dynasty, is well attested for all the Indianized kingdoms of Indochina. It reconciled the native custom of worshipping supernatural beings on high places with the Indian conception of kingship, and provided some sort of national god, closely associated with the monarchy, for the peoples brought under a single ruler. It is a typical example of the way Indian culture, as it spread through Indochina, was able to appropriate and assimilate foreign cults and beliefs, and one which illustrates how Indian and native elements each played a part in forming the early Indochinese civilizations, each reacting upon the other.74

The gradual merger of Indian and native traditions is reflected in the mythical marriage of Kaundinya and the Queen Liu-ye. According to Chinese sources, the first king of Funan came from India or from the Malay peninsula or the southern islands. In a dream his personal genie directed the king to embark on a large merchant junk. The next morning he boarded a ship and sailed to Funan where the queen tried to sack and loot his ship. Kaundinya frightened the queen and she gave up and became his wife. Apparently he was unhappy with her nakedness so he made a garment for her to wear. Then he governed the country and passed power to his descendants.

Just as Kaundinya changed the habits of the queen, Liu-ye, perhaps also the Indianization of Champa led to the institution of other burial traditions. Such a

74 Ibid., p.54.
process would conveniently explain not only the disappearance of the Sa-huỳnh jar burial tradition but also the absence of lingling-oś in the Developed Metal Age jar burial assemblages in Palawan. As Champa became Indianized, the Hindu and Buddhist cults absorbed the native traditions and instituted other fashions in burial and ornament. The jar burials disappeared along the coastlines, and lingling-o production stopped. Outside of the Brahmano-Buddhist sphere of influence, the Philippines continued to perform jar burials, and from this region the tradition spread outward to the other islands in the archipelago and along the periphery of this region (Map 4).

IV.7. The Final Analysis

The picture that emerges from my analysis is that:
1- There is no cultural and/or historical precedent for jar burials in Southeast Asia. The archaeological record indicates that there are no jar burials in the Philippines before they suddenly appeared c.700 B.C. in the Tabon Caves. Elsewhere in Sarawak and Vietnam, archaeologists claim that they have excavated jar burials which pre-date the Chamber A Manunggul Cave site. As I have previously discussed, I have eliminated both the proto-Sa-huỳnh and Niah Cave data because of the associated chronological and data inconsistencies. This means that Chamber A Manunggul Cave is not only the
oldest jar burial site in the Philippines, but also the oldest in Southeast Asia.

2- The Philippine jar burial tradition first emerged in the Late Neolithic and has continued as a way of death until the present. Indonesia also exhibits a similar chronological continuity of jar burials though I believe that the burial tradition commenced later in the Metal Age and still continues today among various indigenous tribes. Unlike Indonesia and the Philippines, the Vietnam jar burial tradition was short lived and dates from c.400 B.C.-c.A.D.200, after which it completely disappeared only to be replaced by Brahmano-Buddhist burial practices.

3- With no chronological or historical precedent for Southeast Asian jar burials, I assume that this burial form represents a cultural intrusion from elsewhere in Asia. Ethnologists and archaeologists both claim that there is a cultural link between Southeast Asia and South China. Therefore, it would seem reasonable that a Southeast Asian burial tradition might also emanate from this region, yet my research indicates that there are virtually no jar burials in South China. Instead archaeologists have unearthed jar burials in North China along the Huanghe and Weihe which exhibit a chronological continuum from c.3000 B.C.-c.A.D.300.

4- The jar burial tradition of North China is a burial form which is reserved almost exclusively for
infants and children. The inhabitants buried the young in discarded cooking vessels and placed the jars or pottery coffins in pits near the houses while adults were buried in supine or prone positions in single graves located away from the settlement. Only in rare instances did the inhabitants perform adult jar burials. The archaeological reports indicate that there are important distinctions between adult and child jar burials: 1- jar burials are primary inhumations while adult ones are secondary. 2- The inhabitants buried children in discarded cooking vessels and adults in expressly designed funerary jars with matching covers. Another particularly interesting fact also emerged from my analysis of jar burials in North China: that jar burials are an extremely rare burial form. Even though archaeologists have unearthed thousands of Neolithic burials, I have identified only 38 Neolithic sites which contain jar burials, and these burials usually represent only a small percentage of the total number of inhumations.

5- After a systematic analysis of jar burials in both Southeast and East Asia e.g. Japan and China, I believe that the highly developed death cult which suddenly appeared in Tabon emanated from the jar burial tradition of North China. The key to determining the origin of the Southeast Asian jar burial tradition lies not in an analysis of jar burial assemblages, but rather in an understanding of why the inhabitants of North China
or Southeast Asia ever performed jar burials. I contend that the infrequent use of jar burials in North China is central to the issue. The rarity of their occurrence suggests that the inhabitants of North China designated different forms of burial for various types of death, and that the conditions associated with a "jar burial death" were somehow distinct from most other deaths.

6- How this demonstrates that the Southeast Asian jar burial tradition originally emanated from the burial traditions of North China can best be explained by a re-examination of the population movements from North China to south Korea-north Kyushu c.300 B.C. History describes how thousands of inhabitants of North China fled the onslaught of the Qin armies and sought refuge farther east. The region witnessed the introduction of new technologies as well as the sudden appearance of jar burials for both adults and children. Just as there was no cultural or historical precedent for the sudden appearance of Tabon jar burials, there is also no historical precedent for Yayoi jar burials. Kaneko has no doubt this burial form originated in the burial traditions of North China, but makes no attempt to explain why the jar burial tradition changed between south Korea-north Kyushu and China. To present an explanation I return to my main point which is: jar burials are an unusual burial form in North China and that this type of burial distinguishes a "jar burial death" from other kinds. Yet what occurred between south
Korea-north Kyushu and North China to alter the tradition? I contend that the Yayoi jar burials and the Chamber A Manunngul Cave jar burials have one main point in common: both represent a sudden introduction of a highly complex burial tradition which has no regional precedent. Such conditions imply that these jar burials are cultural intrusions brought to both regions by people who carried the burial traditions of North China -- a process which involves the actual movement of people. And I assert that it is this movement away from the ancestral homeland which created the unusual circumstances which required the people to perform jar burials for both adults and children. No longer could the people expect a traditional burial in their ancestral grounds and so their burial tradition dictated that they perform jar burials. Perhaps they buried the dead in jars to signify their homeless state or perhaps they hoped that a relative would transport the remains home. In either case jar burials continued to represent an unusual burial form which distinguished this type of death from those performed back in their homeland.

7- The archaeological record indicates that the Yayoi jar burial tradition never spread southward into the Ryukyu Islands though farther south the Philippines and Vietnam also experienced an increase in jar burials over a similar time period. With no archaeological evidence of a northern "jar burial people" reaching south, I believe it is reasonable to assume that the
expansion was a regional phenomenon. There is really no reason to look elsewhere in Asia to explain the increase in sites. Fox has already established not only a Late Neolithic date for Chamber A Manunggul Cave but also a chronological continuity for Tabon jar burial caves which extends from c.700 B.C.-c.A.D.500.

8- An analysis of three jar burial sites: Tabon, Sa-huỳnh and Kalanay indicates that Southeast Asian jar burial sites share a similar funerary tradition while the individual sites exhibit regional not crosscultural developments. Not only a comparison of pottery forms and designs but also the actual burial of jars emphasizes the local nature of this way of death. While the pottery assemblages indicate regional specialization, the non-ceramic artifacts suggest that the jar burial sites shared a similar level of social and technological development. Though there are minor differences among the assemblages, they usually contain personal ornaments and tools and/or weapons. One ornament of particular interest is the lingling-o which archaeologists have unearthed on both sides of the South China Sea. Its presence in both the Philippines and Vietnam suggests that it was an important trade item which Fox describes as a diagnostic ornament of the Early Metal Age jar burial caves in Palawan. Surprisingly though during the Developed Metal Age, the lingling-o no longer formed part of the Tabon jar burial assemblage. Perhaps its sudden appearance and disappearance is related to the short lived duration of the Sa-huỳnh jar burials.
9- While jar burials represent a short lived burial tradition in Vietnam, this way of death continued in the Philippines from where it spread both north and south among the island cultures. The region includes those islands which remained outside major cultural changes in mainland Southeast Asia. Only indirectly affected by the lucrative South China Sea trade, the Philippines continued to live their Neolithic past and perform jar burials. Not until the Spanish arrived in the sixteenth century was there any impetus to change, and even then jar burials continued on a considerable scale.
MAP 1
Neolithic Jar Burial Sites in Asia
Southeast Asia
1- Tabon, Palawan, Philippines
2- Niah, Sarawak, Malaysia
3- Bau Tram, Vietnam
4- Long Thanh, Vietnam

China
5- Baiyangcun, Binchuan, Yunnan
6- Dadunzi, Yuanmou, Yunnan
7- Dalitaliha, Dulan, Qinghai
8- Yuanyangchi, Yongchang, Gansu
9- Tugutai, Lanzhou, Gansu
10- Beishouling, Baoji, Shaanxi
11- Xiameng, Bin, Shaanxi
12- Banpo, Xian, Shaanxi
13- Jiangzhai, Lintong, Shaanxi
14- Jinchengbao, Linfen, Shanxi
15- Yudao, Fenyang, Shanxi
16- Guangshe, Taiyuan, Shanxi
17- Dakou, Jungar Banner, Inner Mongolia
18- Yuanmao Gedan, Qingshuihe, Inner Mongolia
19- Chuandao, Qingshuihe, Inner Mongolia
20- Gaojiabeizi, Qingshuihe, Inner Mongolia
21- Gue, Tangshan, Hebei
22- Wangwan, Luoyang, Henan
23- Tumen, Yichuan, Henan
24- Heyu, Luanchuan, Henan
25- Danjiang, Henan
26- Xiawanggang, Xichuan, Henan
27- Erlanggang, Nanzhao, Henan
28- Maocaozi, Tanghe, Henan
29- Zhaicigang, Tanghe, Henan
30- Quigongcheng, Lushan, Henan
31- Dazhang, Linru, Henan
32- Baisha, Yuxian, Henan
33- Dahe, Zhengzhou, Henan
34- Qingtai, Guangwuzhen, Chenggao, Henan
35- Chengou, Guangwuzhen, Chenggao, Henan
36- Liuzhuang, Qixian, Henan
37- Xiaotun, Anyang, Henan
38- Dasikong, Anyang, Henan
39- Sipanmo, Anyang, Henan
40- Beixin, Tengxian, Shandong
41- Yunxian, Hubei
42- Guanmiaoshan, Zhijiang, Hubei
Japan

43- Kakinokidaira, Iwate
44- Iwagasawa, Iwate
45- Iwama-cho, Ibaragi
46- Kuroya, Saitama
47- Kurotani Midden, Saitama
48- Togariishi, Nagano
49- Yosukeone, Nagano
50- Hiraide, Nagano
51- Tonai, Nagano
52- Nishihara, Yamanashi
53- Tsutano, Yamanashi
54- Sakai, Yamanashi
55- Sudama-cho, Yamanashi
56- Samukaze, Chiba
57- Narahara, Tokyo
58- Nakasugao, Tokyo
59- Ninomiya, Tokyo
60- International Christian University, Tokyo
Southeast Asia

1- Uyaw Cave, Tabon, Palawan, Philippines
2- Tabon Cave, Tabon, Palawan, Philippines
3- Guri Cave, Tabon, Palawan, Philippines
4- Duyong Cave, Iwaig, Palawan, Philippines
5- Rito-Fabian Cave, Tabon, Palawan, Philippines
6- Chamber B, Manunggul Cave, Tabon, Palawan, Philippines
7- Batu Puti, Tabon, Palawan, Philippines
8- Pagayona Cave, Tabon, Palawan, Philippines
9- Tadyaw Cave, Tabon, Palawan, Philippines
10- Diwata Cave, Tabon, Palawan, Philippines
11- Magsuhot, Negros, Philippines
12- Kalanay Cave, Masbate, Philippines
13- Makabog, Masbate, Philippines
14- Pokanin, Mindoro, Philippines
15- S.W. of Boak, Marinduque, Philippines
16- Bato Caves, Sorsogon, Philippines
17- Pilar, Sorsogon, Philippines
18- Little Tigkiw Site, Sorsogon, Philippines
19- Mataas Sites, Cagraray Island, Philippines
20- Misibis - Kagbulakaw Area, Cagraray Island, Philippines
21- Tumagudtud, San Narciso, Luzon, Philippines
22- Recudo, San Narciso, Luzon, Philippines
23- Tam My, Vietnam
24- Phu Khuong, Vietnam
25- Sa-huynh, Vietnam
26- Hoa Vinh, Vietnam
27- Phu Hoa, Vietnam
28- Dau Giay, Vietnam
29- Hang Gon 9, Vietnam
30- Nieh, Sarawak, Malaysia (?)
31- Leang Buidane, Salebabu Island, Talaud Islands (?)
32- Leang Balangingi, Karakellang Island, Talaud Islands (?)
33- Ulu Leang 2, South Sulawesi, Indonesia

China

34- Longkoucun, Fengxian, Shaanxi
35- Liyang, Lintong, Shaanxi
36- Xiahuayuan, Xuanhua, Hebei
37- Shijiaqiao, Changping, Hebei
38- Sutianjun, Changping, Hebei
39- Tiantannei, Beijing, Hebei
40- Zhongguanyuan, Beijing, Hebei
41- Chengmenwai Balizhuang, Beijing, Hebei
42- Qinghezhen, Beijing, Hebei
43- Beiguan, Changli, Hebei
44- Jiakezhuang, Tangshan, Hebei
China cont.

45- Xuzhuang, Tangshan, Hebei
46- Gugezhuang, Tangshan, Hebei
47- Tianzhuangtou, Ninghe, Hebei
48- Zhaoxue, Ninghe, Hebei
49- Juhezhuang, Tianjin, Hebei
50- Yundoudian, Zhuoqian, Hebei
51- Yanxiadou, Yixian, Hebei
52- Zhufancun, Qinhe, Hebei
53- Wujiabang, Wuanxian, Hebei
54- Chengziya, Jinan, Shandong
55- Zhongzhuoliu, Luoyang, Henan
56- Xiguanjian, Luoyang, Henan
57- Boguantun, Shenyang, Liaoning
58- Dina, Liaoyang, Liaoning
59- Tanhutun, Liaoyang, Liaoning
60- Sandaohao, Liaoyang, Liaoning
61- Muyangcheng, Laotieshan, Liaoning
62- Yuuhuangmiao, Laotieshan, Liaoning

Korea

63- Pyongnamjin, North Korea
64- Pyongnamjin, North Korea
65- Pyongnamjin, North Korea
66- Hoehyal Shellmound, Kimhae, South Korea
67- Nangmin-dong Site, Tongmae, South Korea
68- Sinch'ang-ni Site, Kwangsangun, South Korea

Japan

69- Tsushima Island
70- Iki Island
71- Joban, Iwate
72- Kashimayama, Yamagata
73- Nishidaihata, Miyagi
74- Minami Koizumi, Miyagi
75- Kiyomizu, Miyagi
76- Uenojiri, Fukushima
77- Nekoya, Fukushima
78- Tochigi-ken Izuruha, Tokyo
79- Jagamebashi, Mie
80- Toyota, Hiroshima
81- Shimonoseki City, Yamaguchi
82- Shinmachi, Fukuoka
83- Suku, Fukuoka
84- Kanmachi, Fukuoka
85- Tateiwa, Fukuoka
86- Itazuke, Fukuoka
87- Maebara, Fukuoka
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MAP 3
Coastal China, Korea, Japan
MAP 4
Jar Burials in Asia c. A.D. 500 - c. 1500

MONGOLIA

NORTH KOREA

SOUTH KOREA

BEIJING

SHANGHAI

LAZHO

LUZHOU

KHUNMING

HONG KONG

TAIPEI

TAIWAN

TAIWAN

HAINAN

PACIFIC OCEAN

EAST CHINA SEA

SHANGHAI

NORTH CHINA

BURMA

THAILAND

VIETNAM

MALAYSIA

SOUTH CHINA SEA

JAVA

SUMATRA

SARAWAK

BORNEO

KUALA LUMPUR

BANGKOK

PHNOM PENH

HO CHI MINH CITY

MANILA

PALAWAN

SOUTH CHINA SEA

PHILIPPINES

SULAWESI

JAVA

SUMATRA

SARAWAK

BORNEO
Botel Tobago
1- Yayu
2- Imourod
3- Lobusbussan

Batanes Islands
4- Itbayat
5- Batan
6- Sabtang

Babuyan Islands
7- Babuyan Claro
8- Calayan
9- Dalupiri
10- Camiguin
11- Fuga

Philippines
12- Cabarruan, Solano, Luzon
13- Balingasay, Bolinao, Luzon
14- Balincaguin, Pagasinan, Luzon
15- "Hacienda Ramona Site", Pampanga, Luzon
16- Calubcub Segundo, Batangas, Luzon
17- Recudo, San Narciso, Luzon
18- Tumagudtud, San Narciso, Luzon
19- San Narciso, Luzon
20- Pilar, Sorsogon, Luzon
21- Mataas Sites, Cagraray Island
22- Minarosa Cave, Batan Island
23- Tres Reyes, Marinduque
24- Southwest of Boak, Marinduque
25- "Bathala Cave", Santa Cruz, Marinduque
26- Pamine-Taan, Santa Cruz, Marinduque
27- Gasan, Marinduque
28- Makabog, Masbate
29- Kalanay, Masbate
30- "Extreme northwest tip of the Island", Masbate
31- Wright, Samar
32- Egid, Samar
33- Piapi, Antique, Panay
34- Malandog, Antique, Panay
35- Tigawan, Antique, Panay
36- Malongong, Antique, Panay
37- Bagong Bayan, Buruanga, Panay
Philippines cont.

38- Magsuhot, Bacong, Negros
39- Tabon Near Vallehermosa, Negros
40- "Duhinot", Dapitan-Dipolog, Mindanao
41- "Catalungan", Dapitan-Dipolog, Mindanao
42- Sindangan Bay Region, Mindanao
43- Bolong, Zamboanga, Mindanao
44- Seminoho Rock Shelter, Cotabato, Mindanao
45- Asin Cave, Davao, Mindanao
46- Northwest Side, Basilan Island
47- Bohelebung, Basilan Island
48- West Palawan

Malaysia

49- Magala, Niah
50- Lobang Tulang, Niah
51- Upiusing, Niah

Indonesia

52- Tebingtinggi, Sumatra
53- Anjer, Java
54- Ngrambe, Java
55- Gilimanuk, Bali
56- Melolo, Sumba
57- Salajar Island
58- Sa'bang, Sulawesi
59- Bone, Sulawesi
60- Soppeng, Sulawesi
61- Wadjo, Sulawesi
62- Ulu Leang 2, Sulawesi
63- Leang Buidane, Salebabu Island, Talaud Island (?)
64- Leang Balangingi, Karakellang Island, Talaud Islands (?)

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Figure 1  Chamber A Manunggul Cave Burial Jar  
(Fox, 1970: Frontispiece)
Figure 2  Banpo Burial Jars
(Hsien-an Pan-p'o, 1963: Pl.145)
Figure 3  Quigongcheng Adult Burial Jar and Lid  
(Kaogu 11 (1962): Pl.3)
Figure 4  Jiangzhai Adult Jar Burial
(Kaogu 3 (1973): Pl.3)
Figure 5  Tumen Adult Burial Jar and Lid  
(Kaogu 1 (1961): Pl.3)
Figure 6  Niah Cave Burial Jar 159
(Harrisson, 1967: Pl.35)
Figure 7  Lung-hoa Burial Jars
(Chinh, 1968: 52)
Figure 8 Early Metal Age Jade Ornaments
(Fox, 1970: 125)
Figure 9  Artifacts and Burial, Tumagudtud, San Narciso
(Solheim, 1960: Pl.8)
Figure 10  View of Makabog and Burial Jar 4  
(Solheim, 1954: Pl.1)
Figure 11  North Kyushu Burial Jars
(Kaneko, 1966: 12)
Figure 12  Sa-huynh Burial Jars
(Janse, 1959: P1.2)
Figure 13  Sa-huỳnh Burial Jars and Lids
(Parentier, 1924: 328)

Figure 14  Tam My Burial Jars
(Can and Kinh, 1977: 50)
Figure 15-1, 2, 3  Hang Gon 9 Burial Jars
(Saurin, 1973: 357)
Figure 16  Dau Giay Jar Burial 3 and Site
(Fontaine, 1971: Pl.1)
Figure 17  Phu Hoa Burial Jars  
(Fontaine, 1972: 406)
Figure 18  Dalupiri Jar Burial in Stone Cairn
(Bartlett, 1937: Pl.1)

Figure 19  Fuga Jar Burials
(Solheim, 1960: Pl.2)
Figure 20  Batanes Jar Burial with Three Flexed Burials (Solheim, 1960: Pl.5)

Figure 21  Upper Portion of Botel Tobago Burial Jar (De Beauclair, 1972: 169)
Figure 22  Lobusbussan Jar 4
(Stamps, 1980: 186)
Fig. 6. Jar E1, the largest of a series of four plain jars of grayish stoneware with an olive green glaze. The other three are of similar body but with olive brown to brown glazes. Height: 30.1 cm. Max. Width: 22.6 cm. (Natural size).

Fig. 7. Jar Fi is of gray to buff stoneware, burnt brown where exposed. It is glazed olive brown. Sherds of six similar jar units with a characteristic wide mouth were found in the Magola grottos. Height: 21.7 cm. Max. Width: 18.3 cm. (Natural size).

Fig. 8. Jar Hg, representative of a group of 18, the only specimen of this type with the mouth and lip intact. These jars are medium to large with thick, olive brown to black glaze, speckled finely with a lighter brown giving a Tenmoku effect. A type commonly used in metal age burial caves with mouth and lip chiselled off (see discussion in main text). Height: 30 cm. Max. Width: 25 cm. (Natural size).

Fig. 9. A large bowl from the Sawankhalok kilns of Siam, K2. There were two of these, with a thick, gray celadon glaze, fluted rim, ribbed body and combed decor. A third specimen of this 14th-15th century ware was a celadon dish. Height: 9.5 cm. Max. Width: 15 cm. (Natural size).

Figure 23 Kayu Malam Burial Jars (Harrisson, 1968: Figures 6, 7, 8)
Figure 24  Upiusing Cave Burial Jar
(Harrisson, 1965: Pl.23)
Figure 25  Leang Buidane Large Jars
(Bellwood, 1981: 97)
Figure 26 Melolo Jar Burial
(Soejono, 1969: Pl.21)

Figure 27 Gilimanuk Jar Burial
(Soejono, 1969: Pl.24)
Figure 28  Anjer Jar Burial
(Soejono, 1969: Pl.20)
Figure 29  Trunconical Cover Design  
(Parmentier, 1924: 329)

Figure 30  Sa-huynh Trunconical Vases  
(Parmentier, 1924: 330)

Figure 31  Sa-huynh Vessels  
(Parmentier, 1924: 330)

Figure 32  Sa-huynh Vessels  
(Parmentier, 1924: 331)
Figure 33  Sa-huỳnh Vessels  
(Parmentier, 1924: 332)
Figure 37  Sa-huỳnh Black Vessels  
(Parmentier, 1924: 335)

Figure 38  Sa-huỳnh Beads  
(Parmentier, 1924: 338)

Figure 39  Sa-huỳnh Ornaments  
(Parmentier, 1924: 339)

Figure 40  Sa-huỳnh Metal Artifacts  
(Parmentier, 1924: 340)
Figure 42  Kalanay-Incised Vessels
(Solheim, 1964: 41, 42)
Figure 43  Kalanay Anthropomorphic Head and Shallow Bowl with Four Effigy Head Feet  
(Solheim, 1957: 281)
Figure 44  Kalanay Complex Pottery Designs
(Solheim, 1964: 14)
Figure 45 Kalanay-Impressed Vessels
(Solheim, 1964: 47)

Figure 46 Kalanay-Slipped Vessels
(Solheim, 1964: 50)
Figure 47 Baguapantao-Plain Vessels
(Solheim, 1964: 53)
Figure 48  Bagupantao-Incised, Bagupantao-Impressed, and Bagupantao-Painted Vessels  
(Solheim, 1964: 56)
Figure 49  Kalanay Non-Ceramic Artifacts
(Solheim, 1964: 76)
Figure 50  Ngipe't Duldug Cave Vessels
(Fox, 1970: 108)
Figure 51  Tabon Pottery Complex Vessel Forms and Decoration (Fox, 1970: 95)
Figure 52 Tabon Impressed Designs from Buyong Cave Sherds (Fox, 1970: 82, 84)
Figure 53  Chamber A Manunggul Cave Burial Jars
(Fox, 1970: 86)
Figure 54  Tabon Incised and Impressed Designs from Duyong Cave Sherds (Fox, 1970: 88)
Figure 55  Tabon Incised and Painted Shallow Bowl
(Fox, 1970: 89)

Figure 56  Chamber A Hanunggul Cave Vessels
(Fox, 1970: 113)
Figure 57  Tabon Pottery Complex Vessel Forms  
(Fox, 1970: 93)
Figure 58  Pagayona Cave Spouted Effigy Vessel  
(Fox, 1970: 149)

Figure 59  Leta Leta Cave Yawning Jar  
(Solheim, 1981: 36)
Figure 60  Jade Bracelets from the Tabon Caves  
(Fox, 1970: 128)
Figure 61  Shell Artifacts from the Tabon Caves
(Fox, 1970: 146)
Figure 62  Clay Pendants from the Tabon Caves  
(Fox, 1970: 147)

Figure 63  Pagsanjan Cave Floor Plan  
(Fox, 1970: 148)
Figure 64  Trunconical Covers from Tabon Caves
(Fox, 1970: 154)
Figure 65  Tadyaw Cave Jade Bracelet
(Fox, 1970: 153)

Figure 66  Guri Cave Burial Jar and Cover
(Fox, 1970: 51)
Figure 67  Kalanay-Plain Deep and Shallow Bowls  
(Solheim, 1964: 37)

Figure 68  Kalanay-Plain Bowl and Jars  
(Solheim, 1964: 38)
Figure 69  Tabon Pottery Complex Designs
(Fox, 1970: 97)
Figure 70  Sa-huynh Pottery Design  
(Parmentier, 1924: 329)

Figure 71  Sa-huynh Vessels  
(Parmentier, 1924: 336)
Figure 72 Sa-huynh Pottery Designs
Figure 73 Sa-huynh Pottery
(Parmentier, 1924: Pl. 4, 5, 6)
Figure 74 Sa-huynh Pottery
(Malleret, 1959: Pl.1-9)
Figure 74 cont.
Figure 74 cont.


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ADDENDUM

A question has arisen concerning the chronological gap which exists between the jar burials of North China and Chamber A Manunggul Cave. Though the Yangshao jar burials establish a historical and cultural precedent for the Chamber A jar burials, nearly 2000 years separate the two burial traditions.

I contend that the jar burial tradition of North China formed part of on-going burial tradition which began in the Neolithic and continued into the Han dynasty or later. Though the archaeological record offers scant evidence for adult jar burials c.700 B.C., both the Li Ji and a Han royal burial suggest that the inhabitants of North China performed adult jar burials for an extended period of time. Confucius specifically states that "To sacrifice to a full-grown man for whom there have been the funeral rites without a representative, would be to treat him as if he had died prematurely." I conclude from this passage that c.400 B.C. the burial tradition of North China continued to distinguish between adult and non-adult funerals and a non-adult received a burial "as if he had died prematurely" e.g. jar burial. The archaeological record indicates that the Han royal family also performed adult jar burials. Archaeologists unearthed a joint burial jar among the Imperial Han tombs of Liaoyang which measured 2.4 meters and contained the leg bones of an old lady.

I assume that neither Confucius nor the Han royal
family proposed radical changes in traditional cultural practices. Their orthodox approach to life would suggest that the non-adult burial for a "full grown man with no representative" and the Han royal adult jar burial formed part of a burial tradition that:

1- archaeologists first witnessed in the Neolithic;
2- Confucius later proscribed in the Spring and Autumn Annals;
3- the Han royal family performed during the Eastern Han.

For how long this jar burial tradition continued remains open to conjecture. De Groot gives evidence that the inhabitants of South China performed jar burials as late as the nineteenth century. He observed that adults without offspring were committed to the earth "in urns or poor coffins, without much ceremony."

Another question concerns the problem of determining the contents of burial jars from Southeast Asian and Chinese jar burial sites. A synopsis of the various archaeological reports indicates that:

1- China- The Chinese archaeological reports offer fairly clear descriptions of both jar forms and contents. They distinguish between adult and child burials and designate the number of each type of jar burial e.g. five adult, four infant.
2- Japan- The Japanese archaeological reports are less specific than the Chinese ones. I am not suggesting that Japanese archaeologists have erroneously identified jar burial sites. For the last 50 years they have excavated vast numbers of Yayoi jar burials in North Kyushu alone, but they often neglect to specify whether the jars are empty or contain adult or child inhumations. If the archaeologists find human remains, they never mention the type of burial: primary, secondary, cremation.

3- Southeast Asia- Vagueness and confusion also surround Southeast Asian archaeological reports which often makes it difficult to determine the contents of jar burials.

Elsewhere I mentioned these difficulties in specific reference to the Niah Cave and Vietnamese archaeological sites. Where possible I have noted jar contents or mentioned the problems involved with that particular site. Difficulties often focus on whether the jars are jar burials or just buried jars.

Similar problems affect the Philippine archaeological reports. Though Fox and Solheim have pioneered the use of scientific archaeological methods, they also assume that a buried jar is a burial jar. Fox claims that he unearthed four small jar burials in Ngipe't Duldug Cave though the jars contained no skeletal remains. Solheim reports that he excavated five jar burials at the Makabog open-air site. These jars
contained glass beads, stone tools and pottery but no skeletal remains. In the Philippines it is not unreasonable to assume that a buried jar is a burial jar. The sheer number and frequency with which archaeologists excavate jar burials suggests that most buried jars which conform to certain burial patterns originally contained adult or child inhumations. This holds true especially for jar burials in limestone caves and cliffs. The inhabitants of the Philippines often performed jar burials in caves overlooking the sea. Though these burial jars often contained skeletal remains, archaeologists fall into a trap of assuming that every large jar is a jar burial. For further research purposes it is absolutely necessary to indicate the contents of the jars. And if the jars contain no skeletal remains, then the archaeologists must explain why they still believe that the site is a jar burial site. In his 1947 archaeological report Otley Beyer includes jar burial sites for which he has no concrete evidence. So also is the case with the Kalanay Cave report.