

# **Chronological Context of Non-Decorated Black Pottery Phase from Lal-lo Shell Middens**

- **Analyses of the Black Pottery from Conciso Site, Catayuan Shell Midden,**
- **in the Lal-lo Shell Middens, Northern Luzon, Philippines -**

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## **Introduction**

Black Potteries, those having black colored surface were first found in Bangag I Shell Midden (Fig. 1), one of Lal-lo Shell Middens, in the late 1970's (Aoyagi 1977-83, Aoyagi and Okazaki 1981). Bangag I Shell Midden is located in the Cagayan River bank, fronting Magapit Shell Midden which is found on the limestone hill on the opposite bank of the River. Bangag I Shell Midden forms a mound about 100 meters in diameter, and two to three meters high. The black colored potteries were collected from the surface of shell midden, and these potsherds have incised designs. During the exploration of Lal-lo Shell Middens on the Cagayan River bank in the late 1980s, black pottery sherds were also collected from Catayuan, Santa Maria, San Lorenzo, Catugan, Lal-lo Centro, Cortez and Camalaniugan Centro Sur Shell Middens (Fig. 1). But those black pottery sherds didn't have decorations, except Catugan and Cortez Shell Middens, as compared to the Black Pottery from Bangag Shell Midden. Before the 1990s research, we recognized that two kinds of cultural phases of pottery had existed in Lal-lo Shell Middens; these are the Red-Slipped Pottery Phase and Black Pottery Phase, and both phases have decorated and non-decorated pottery phases. The chronological context of those pottery phases is not clear until the present stage of research, but by the stratigraphical context and the C14 datings acquired from Magapit and Catayuan, we could infer that the Red-Slipped Pottery Phase existed earlier than Black Pottery Phase (Aoyagi et. al. 1988-1993).

Results of the explorations and excavations conducted in the 1990's in Lal-lo Shell Middens showed a clear chronological context of pottery phase. Most of the riverbank site produces the non-decorated red-slipped pottery from the silt layer under shell deposit, while the decorated or non-decorated black potteries were found from shell midden. But the chronological context between the decorated and non-decorated black pottery is still unknown, because we have no stratigraphical contextual evidence of those two Black Pottery Phases by the excavations (De la Torre 1995-2000, Garong 1996-2001, Garong and Toizumi 2000, Ogawa 1998-2001, Orogo 1995, Tanaka 1998-1999). Based from the excavated materials, the latest chronological order of the pottery cultural phases in the Lal-lo Shell Middens can be summarized as follows; the Non-Decorated Red-Slipped Pottery Phase Decorated Black Pottery Phase Non-Decorated Black Pottery Phase. This chronological order was verified by the excavations of Cortez, Dombrique and David site in 2001(Ogawa 2003). The unknown chronological order by stratigraphical context, such as the chronological relationships between the decorated red-slipped pottery phase and non-decorated red-slipped pottery phase is not yet revealed in the Lal-lo Shell Middens. By the results of C14 dating (Table 1), the datings of chronological order of those cultural phases can be summarized or inferred as follows; The Decorated Red-Slipped Pottery Phase 4000 to 3500BP The Non-Decorated Red-Slipped Pottery Phase 3400 to 3000BP The Decorated Black Pottery Phase 2000 to 1500BP The Non-Decorated Black Pottery Phase 1500 to 1000BP(Ogawa 2003).

This paper will discuss the chronological context of the non-decorated black potteries based on the analyses of potteries from Conciso Site in Catayuan Shell Midden. I will start from the description and classification of those excavated earthenware sherds, and I will specify the characteristics of the non-decorated black pottery phase. The archaeologists of the National Museum of the Philippines have done excavations of this site since 1995. The results of excavations have been published already by Garong and Toizumi (Garong 1996a, 1996b, 2001, 2002, Garong and Toizumi 2000, Toizumi 1999).

## **1. Black colored potteries and the Black Pottery Cultural Phase**

The smudging of charcoal in the wall of vessel after firing makes the black color of the surface. After firing of potteries, the potters put the potteries into some organic matters like rice husks. Then the potteries are still hot, so, by the heat of pottery itself, the rice husks are burned and the charcoal comes into the wall of pottery. This is a possible process of smudging and the surface color of potteries became black.

But the whole potteries belongs to Black Pottery Phases of the Lal-lo Shell Middens are not necessarily black. Those pottery

phases have wide range of vessel types, like Jar, Bowl, Stove and others, and even only in Jar Type pottery, there are also variations of shapes, or subtypes. In the Black Pottery Phase, we can find many earthenware sherds, which do not have black color by smudging. Those potsherds cannot be classified into particular type or subtype. The criteria to classify potteries into the Black Pottery Phase are not the surface color of vessels, but the total characteristics of pottery phase found in the same horizon of shell layers. Those characteristics of potteries are shape, form of vessels, paste, firing, polish or wiping of pot surface and so on. For convenience's sake, the term black pottery was used to differentiate it from the Red-Slipped Pottery Phase.

This context of nomenclature of cultural phases for convenience's sake is same as red-slipped potteries in Lal-lo Shell Middens. Both decorated red-slipped pottery phase and non-decorated red-slipped pottery phase have a wide variation of vessel types. The red slip seen on the sherds excavated is major characteristics of these pottery phases. But there are also many types of potteries finished only by wiping of vessel surface without red slip. The criteria to classify the potteries into the decorated or non-decorated red-slipped pottery phases is also not the surface color of vessels, but the total characteristics of pottery phase found in the same horizon of shell layers.

## **2. Analyses of potteries; Method and Results**

Study on the chronology and typology of Black Pottery Phase from Lal-lo Shell Middens are still limited. This paper is an attempt to understand its characters, types of the non-decorated black pottery by using the method I used in analyzing the red-slipped potteries from Magapit (Aoyagi et. al. 1991) and Irigayen Site (Ogawa 2002a, 2003); I will analyze the non-decorated black potteries from Conciso Site in Catayauan Shell Midden.

The shell midden deposit in Conciso Site is almost two meters deep. Many house holes and pits can be seen on the walls of section, especially from 0 to 50cm deep from the soil surface (Fig. 3). Those house holes are also recognized horizontally during the excavation of shell layers. At the bottom of shell layers, silt layer under the shell, not only house holes, but also an extended burial pits are recovered in the last layer of shell deposit and the first layer of silt. Some whole shape earthenware vessels were revealed from burial pits together with human skeletal remains, but mostly the potteries were fragmented and found in the all shell layers from the top to the bottom. From the silt layer under shell midden, the red-slipped earthenware sherds were found. From burial pits and shell layers, the non-decorated black pottery sherds were found. At the upper shell layers, not smudged and dark brown colored vessel sherds were recognized. The followings are the results of analyses on the potsherds from shell layers.

The pottery sherds from Conciso Site can be classified into Jar Type, Bowl Type, Ring-foot of Bowl, Stove and Others. Jars and bowls have polished surface, fine paste but coarser than Red-slipped Pottery, mica-contained paste and good firing, there are two types of earthenware sherds, the one has thick wall and the other thin. The thin one is not smudged and the color of the surface is dark brown. The thickly made pottery belongs to the non-decorated black pottery phase. The thin one normally revealed from shallow depth which is mostly - 50cm from the top soil. Following are their descriptions.

### **2.1. Jar Type Pottery**

Jar type vessel has a widely opened mouth, externally everted mouth rim, maximum diameter at the middle of body and round base. No decorations are recognized on this type of potteries. The function of this type of pottery must to be for boiling. As mentioned above, there are two groups of potteries. Potteries with thick and thin wall. The smudging can be seen on some thickly made potsherds. The thin one revealed from shallow portion of shell layers, until -50cm from top soil. But both of them share some characteristics, such as no decoration, mica-contained paste, and polished surface and rim shape. I will describe both pottery groups together in the following

**J-1:** This type has an everted rim, pointed lip and convex shape of inner rim surface (Fig. 4: 1-7). Those rim sherds are revealed from the deepest portion of shell midden, more than -120cm deep.

**J-2:** This type has an everted rim with rectangular shape (Fig. 4: 8-9). The section of rim wall shows parallel lines of inner and outer surface and the lip section is quadrangular.

**J-3:** This type has an everted rim with thickly widen lip (Fig.4: 11, 45). The rim gradually widens from the neck. There are also rims with thickly widen lip (**J-5** Type). But this one has convex shape of section on the inner portion and another one has a concave

section.

**J-4:** This type of rim is everted and incurvate at the lip, so that the section of inner surface makes a concave shape (Fig. 4: 12-22). Also the inner lip is thickened.

**J-5:** This type has an everted and incurvate rim with thickly widen lip, but not like **J-3** Type, the section of rim wall shows concave line on the inner surface (Fig. 4: 23-44). Also the inner lip is thickened like **J-4** Type rim. The rim No. 39 to 44 has relatively thin. Those rims are revealed in the upper portion of shell layers (Fig. 4: 39-44).

**J-6:** This type has an everted and incurvate rim (Fig. 5: 1-5). The wall of vessel is thinly made. At the both side of lip, inner and outer surface are thickened. Those rims also revealed from the upper portion of shell layer.

**J-7:** This type has an everted and incurvate rim shape (Fig. 5: 6, 7). At the both side of lip, inner and outer surface is thickened. Comparing with **J-6** Type rims, the lip of this type rim is more incurvate.

**J-8:** This rim type is everted and thickened at the inner lip (Fig. 5: 8-10). **J-5** Type rims are similar to this type, but the concave section is not so as prominent as **J-5**.

**J-9:** This type has an everted and excurvate rim (Fig. 5: 11-18). The section of wall shows the convex shape of inner surface, and the outer lip is thickened. Only No. 16 is thickened also inner lip.

**J-10:** This type of rim is everted and thickly made (Fig. 5: 19).

**J-11:** This type of rim has a carination at the inner neck (Fig. 5: 20). This carination is prominent because it has low angle.

**J-12:** This type has a long neck (Fig. 5: 21-26). The neck stands strait and excurvate at the top of rim. Those are mostly thickened at the outer rim. No.24 has a gentle carination at the neck. But No.23 has not a carination at the neck and might be gently connected to the body. Maybe No. 21, 22 and 25 also might show the same shape.

**J-13:** This type of rim gently comes up from the body part and thickened at the outer rim (Fig. 5: 27-30).

The characteristics of those Jar Type potteries described above can be considered extract as the ones of non-decorated black pottery. But some potsherds classified into **J-5** Type No. 39 to 44, **J-6** Type and **J-11** Type do not belong to the non-decorated black pottery phase. They came from the upper layer of shell midden. They also share some features with the non-decorated black pottery phase, but they are not smudged and thinly made. Differences on the rim shapes of pottery from upper layer can be recognized from the non-decorated black pottery phase. But there exist the time gap between lower and upper pottery groups. Materials collected from the upper potteries were limited, but it might be possible to establish the other pottery cultural phase after the non-decorated black pottery phase.

## **2-2. Bowl Type Pottery**

The Bowl Type pottery has a wide opened body and relatively low ring-foot. The wall of body is made thickly comparing with Jar type pottery. The surface of pottery is sometimes red-slipped and polished. The smudging is also observed. The paste is same as Jar Type, mica contained paste.

**B-1:** This type has a widely everted body and the rim is slightly incurved (Fig. 5: 31-36, Fig.6: 1, 2). The lip of rim is thickened and widen. All of those rims comes from deep portion of shell midden (lower than -130cm).

**B-2:** This type of rim is also widely everted, widen the lip, but No. 3 has a step at the inside of body, and the inner surface line of No. 4 doesn't describe an arc (Fig. 6: 3, 4).

**B-3:** This type has an everted and excurved (Fig. 6: 5-9). No. 6 and 7 are thickened and excurved the lip. No. 9 is vented the rim horizontally.

**B-4:** This type has a relatively thin made rim (Fig. 6: 10-14). There is possibility that some of those rims belong to Jar Type. But as long as samples are limited, those are classified into Bowl Type at this moment of research.

## **2-3. Ring-foot**

The ring-foot is a part of Bowl Type pottery and attached to the bowl body. The Ring-foot also can be classified into some types by the shape of foot rims.

**R-1:** This is a short and low made ring-foot (Fig. 6: 1). It is also thickly made. It has round perforations at the portion just below the junction with body.

**R-2:** This type of foot rim is excurvate (Fig. 6: 15, 16). No. 15 is excurved and describes an arc. But the foot rim of No. 16 is vented at the lip and doesn't describe an arc.

**R-3:** This type of foot rim is incurved at the lip (Fig. 6: 17-19). The inner lip of No. 19a is thickened. The lip of No. 19b is thickened quadrangular.

**R-4:** This type of ring-foot is everted, and excurved at the middle of ring-foot. And again, the lip is incurved (Fig. 6: 20-22, Fig. 7: 1). No. 1 of Fig. 7 is made high.

**R-5:** This is a small, miniature ring-foot (Fig. 7: 2). There are no other artifacts to infer if it is jar or bowl.

#### **2-4. Lid**

Two knobs of lid are revealed. The hollow is made at the top of lid knob (Fig. 7: 3, 4). They are horizontally polished.

#### **2-5. Stove**

The stove is a daily cooking utensil and widely utilized until now. The shape of stove is normally round and oval. Both types of stove have tree lumps of clay at the top to sustain the cooking pots put on the stove. The mouth of firebox of round shape stove is small but oval shape of stove has a widely opened mouth. The origin of stove must be a hearth with three stone to sustain the pots.

The sherds of stove found in the Conciso Site are three pieces (Fig. 7: 5-7). Three of those are rim part of stove. Those lips are made flat and wide. No. 5 is a part of rim and it must be attached a lump of clay to sustain the vessel. On the out side of lip (left side of figure), the incised design is marked. Those three sherds are revealed from relatively upper part of shell layer.

#### **2-6. Other**

Five pieces of sherds recovered from the deeper portion of shell layer (below than -100cm) are unknown type of pottery (Fig. 7: 8-9, Fig. 8: 1, 2). It is sustained by the ring-foot, but it has no body like bowl. An ear with hole at the center is attached obliquely to the ring-foot on the one side, and at the center, a small hole is made through to ring-foot. It is difficult to understand the other side of the object, but No. 1 of Fig. 8 is a part of this unknown portion. The whole shape of this part can be inferred as rectangular and is also attached obliquely to ring-foot. The whole shape and function of this earthenware object is still unknown. Further samples must be collected to reconstruct the whole shape and its function.

### **3. Discussions and Summary**

By the analyses on the pottery sherds from Conciso Site, the characteristics of the non-decorated black pottery phase can be extracted. The **J-1** Type everted rims have the pointed lip and convex shape of inner rim section. This type rims are found in the deepest layer of shell midden lower than 120cm and cannot be seen in the upper layers. The **J-4** and **J-5** Type rims, its features are concave section of inner rim and widely thickened lip, have a tendency to be revealed from the shell layers -130 to -50cm. But the **J-5** Type rims found in the upper layer less than -50cm have thin wall (Fig. 4: 39-44). This is a different characteristic, because the rims from deep layer are thicker than the ones from upper layer. The **J-6** Type rims, thin wall and thickened both side of lip, are all revealed from upper layer. The long necked jar rims, **J-12** Type, are particular in the lower layer.

Jar Type rims found from the lower shell layer are more thickly made than the ones from upper layer and they are revealed from layers deeper than -50cm. But still the thinly made rims from upper than -50cm have the same characteristics of thickly made ones, such as its shape, widely thickened lip. The paste of those Jar Type rims, mica contained shares also the same characteristics. But the smudging of the pottery cannot be observed on the Jar Type rims from upper layer. Neither the red-slip cannot be recognized on the thinly made rims. The jar rims from upper layer have no slip and no smudging, but polished the surface.

The characteristics of the Jar Type rims from lower layers deeper than -50cm can be extracted as the features of the non-decorated black pottery. Both lower and upper jar rims share the Jar Type rim shapes. But there are some particular types of rims; **J-1** to **J-4** and **J-12** Types are particular to the lower pottery, but **J-6** Type rims are particular to the upper pottery. The

mica-contained paste is observed in both potteries, but the smudging and red slip can be recognized only in the lower pottery. Snow and her colleagues indicated the red-slipped pottery tradition in Northern Luzon (Snow et. al. 1985), but the upper pottery is not red-slipped in Conciso Site. The present potters in Attulu, Iguig, Cagayan also don't use the red slip. But the potters of Santa Maria, Isabella, located in the Middle Cagayan River, use the red slip (Tanaka 1998c). It means that the potters in the Lower Cagayan River changed to stop to make red-slipped pottery at some prehistoric stage.

The Bowl Type pottery cannot be obtained enough samples to discuss the typological similarities and differences at Conciso Site. But the B-1 Type bowl sherds could be extracted as a particular type belonging to the non-decorated black pottery phase. The unknown type of pottery as classified as others has also particular shape. Those are also found from the deeper layer, more than – 120cm. It might be also classified to the non-decorated black pottery phase.

Some features of the non-decorated black pottery can find also in the different sites of Lal-lo Shell Middens. Recent results of analyses on the artifacts from Cortez and David site revealed the features of non-decorated black pottery (Ogawa 2003). Figure 11 shows the comparison of similar rim sherds of Jar Type pottery from three different sites, Conciso, David (Lal-lo Centro) and Cortez (locations can be referred in Fig. 1). The rim shreds of first row in figure 11 can be classified in J-1 type. At the second row, the rim shred of Conciso site was previously classified in J-1 type (see above). But many similar rim shreds are found in David site. So that this type of shreds must be separated from J-1 type. The rim sherds of the third row belong to J-5 type, it also can be found in David site. The fourth row rim sherds belong to J-12 type. This type can be seen in all of three sites. Those four types of jar rims can be the criteria or standard to distinguish the non-decorated black pottery from other potteries of Lal-lo Shell Middens. Figure 9 shows the whole shape pots. Those rim sections indicate that those belong to J-1 to J-4 type; J-1 type (9, 10, 12), J-2 type (8, 11), J-3 type (7) and J-4 type (13). Those whole pots were revealed below -100cm, as the associated materials of extended burials. Figure 10 shows the non-decorated black potteries collected from Irigayen site, Santa Maria, by the collapse of riverbank in the typhoon. Those pots are also the part of associated materials in extended burials. Those materials awaken us the variations of potteries belong to the non-decorated black pottery phase.

The C14 date of human bone from the extended burial of Irigayen site is so far oldest date of the non-decorated black pottery phase: 1560 to 1488BP (Table 1, No. 20). In Conciso site, the oldest C14 date is acquired from the extended burial: 1384 to 1294BP (Burial No. 2, Table 1, No. 12). Also the latest C14 date is acquired from Layer 2 (shell layer): 1056 to 957BP (Table 1, No. 3). It can be summarized the dating of the non-decorated black pottery phase as 1500 to 1000BP.

By the results of analyses of earthenware sherds from Conciso Site, the non-decorated black pottery phase can be established as a prehistoric cultural phase in the Lal-lo Shell Middens in the Lower Cagayan River. The further studies on the cultural materials from sites, it might be possible to verify this cultural phase.

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