Ceramic Remains from Kueishan and Discussions Relating to the Relationship of Formosan Aborigines in Southern Taiwan

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Abstract. The main purpose of this paper is to report on ceramic materials unearthed from the Kueishan site, Pingtung County, southern Taiwan during archeological excavations carried out in 1993 and 1994. Additionally, I argue that insights into the ceramic remains of the Kueishan Cultural Phase and the style of decorated pots may provide essential information for studying the dispersal of Formosan aborigines in southern Taiwan. In addition to other archaeological artifacts and ecofactual remains, approximately 17,000 potsherds were recovered from the site, all remains of the Kueishan Phase. The Kueishan Phase can be dated to 1,500 B.P. Although only 6% of the remains were decorated wares, they are useful for distinguishing the Kueishan Culture. The decorative patterns of Kueishan can be classified into 22 categories. This paper focuses on human figure designs. Vessels marked with these designs suggest not only labor-intensive manufacturing, but also that these were high-value or "prestige" objects within the society. As a result, such decorative motifs may reflect social and cultural contexts of prehistoric Kueishan inhabitants. Together with the archeological remains and ethnographic materials, I argue that prehistoric Kueishan inhabitants and the Paiwan have a common inheritance from early Austronesian-speaking individuals.

Key words: Ceramic remains, Kueishan, Formosan aborigines, Southern Taiwan.

INTRODUCTION

Ceramic analysis has provided important information for the interpretation of the regional prehistory of Taiwan since the early decades of the last century. In particular, diagnostic ceramic assemblages, e.g., the Corded Ware of the Tapenkeng Culture and Fine Red Ware of the Kenting Culture, define most archaeological cultural components in the prehistory of Taiwan. In fact, in response to the growing sophistication of archeological issues being addressed and our technological ability to investigate ceramics, the role of ceramic analysis has increased in complexity and diversity. The main purpose of this paper is to report on ceramic materials unearthed from the Kueishan site (Fig. 1, Plate 1) in archeological excavations carried out in 1993 and 1994.

Additionally, I argue that insights into the ceramic remains and the style of decorated potsherds may provide essential information for studying the dispersal of Formosan aborigines in southern Taiwan. Over the years, many archaeologists have attempted to correlate archaeological culture with existing groups of aborigines in Taiwan (Chang, 1986; Tsang, 1992; Bellwood, 1997). Unfortunately, no concrete evidence is strong enough to link any group with a given archaeological cultural component. Nevertheless, based on building remains and burial patterns, some archaeological sites on the Hengchun Peninsula of the later time period, such as the Nanrenshan site and the Kueitzuchiao site, can be recognized as Paiwan. But since no historic documents place the Paiwan in the area and no modern Paiwan tribes inhabit the area (Fig. 2), the link between the site and the Paiwan remains an unproven hypothesis. In the present study, the results of ceramic investigations provide additional evidence to suggest links between a "community of culture" and extant vessels.

The Setting

The Kueishan site is situated on Kueishan, a hill running N-S, 400 m southwest of Sheliao Village in Checheng, Pingtung County. The hill...
Chulu site in Peinan, Taitung (Yeh, 1994). (See Fig. 2)

My own archaeological excavations at the Kueishan site were carried out in 1993 and 1994 (Li, 1993, 1994, 1995). The inventory of field collections comprises potsherds, clay spindle whorls, pottery bracelet fragments, a broken clay animal figurine, stone net-sinkers, stone hammers, stone knives, chipped stone hoes, polished stone hoes, polished stone adzes, stone projectile points, grinding stones, polished bone points, fragments of polished bone awls, double-pointed gorge fishhooks, two-piece composite fishhooks, iron knives, glass beads, perforated human teeth, perforated animal teeth of wild boar, dog, and clouded leopard, human burials with skeletons, and large quantities of animal bones, fish bones and molluscan shells (Li, 1993, 1994, 1995). The archaeological deposits are enormously rich and diverse, and provide a highly valuable source of information for the study of cultural differentiation, distribution, and change.

The Kueishan Ceramic Assemblage: An Overview

Three different cultural components of the Oluanpi III, Oluanpi IV, and Kueishan Phases can be defined from the site depending on the location and deposits. However, there is no single locus with multiple stratigraphic deposits. In other words, every excavated square unearthed so far has yielded only one component. The Kueishan Phase can be dated to approximately 1,500 B.P. by the three C-14 dates of 1,525 \pm 120 B.P., 1,470 \pm 150 B.P. (Li, 1995), and 1,550 \pm 60 B.P. (Huang et al. 1987). Approximately 17,000 potsherds were recovered from Locus A, which yielded only Kueishan Phase remains. Sherds of less than 1.5 cm² were not collected unless they contained decorative patterns. Plain ware and decorated ware are the two major categories found. Of these, plain ware (Plate 2, 3), comprising 94% (n = 15,926) of all sherds found, makes up the greatest part of the Kueishan assemblage from a quantitative perspective. In addition, red and black are also two major color categories and can easily be distinguished. However, according to the “Munsell soil color chart”, colors present in the sherds range from black, dark gray, gray, light brownish gray, grayish brown, brown, pale brown, and reddish yellow. No pottery kiln has been uncovered at the Chulu site in Peinan, Taitung (Yeh, 1994). (See Fig. 2)

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Vessels with Anthropomorphic Designs

In 1985, Kuang-chou Li first defined the Kueishan Culture based on its ceramic assemblage. The anthropomorphic design is one of the conspicuous factors in the series. Actually, sherds with anthropomorphic designs make up only 2% of the entire collection. However, despite their relatively small number, the system of human figure designs may provide significant information on the dispersal of Austronesian-speaking peoples in southern Taiwan.

In this paper, I focus on the design of human figures, which is further discussed in the following section.

Fig. 3. The pie chart of frequency of Kueishan sherds by decorative patterns

Plate 4. Impressed basket pattern
Plate 5. Cloud and thunder pattern

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By the same method mentioned above, human figure designs were impressed on the body of the vessel. But we have not been able to determine whether human figure designs are confined to specific vessel forms, since no fragment is big enough to reconstruct the original form. Most seen to have been bowls or basins. That is, no evidence indicates that jars were decorated with human designs. Functionally, these bowls and basins would have been used for serving or display, but not for storage or cooking.

Two distinct styles may be classified: (1) human face designs and (2) frog-shaped human figures (Fig. 4). In addition, the human face design appears with different kinds of “headdresses”. Among the frog-shaped human figures we can discern eyebrows, eyes, noses, mouths, and their combinations in the “headdresses”. Before discussing in detail the meaning of these decorative motifs, the essential role these vessels played in prehistoric Kueishan society should be mentioned. Technologically, the potters may have used the same process and consumed the same amount of time making either anthropomorphic
Plate 6. Impressed circle pattern
Plate 7. Trellis pattern
Plate 8. Human figure pattern
Plate 9. Cord mark
Plate 10. Adjunct pattern
Plate 11. Stroke dot pattern
Plate 12. Perpendicular pattern
Plate 13. Punched dot pattern
Plate 14. Geometrical pattern
Plate 15. Painted pattern
Plate 16. Bow string design
Plate 17. Bow string and ||-shape design
Plate 18. Bow string and comb pattern design
Plate 19. Stroke dot and bow string design
Plate 20. Punched dot and bow string design
Plate 21. Incised and Bow string design
of the modern Formosan Paiwan aborigines and their distributions in southern Taiwan. Since the decorated ware comprises only 6% of the Kueishan ceramic assemblage, we must ask: Were the production loci for decorated pottery the same as those for plain pottery? Did plain and decorated pottery have a similar combination of vessel types? Was the distribution of decorated pottery similar to that of plain pottery, or selectively restricted? Furthermore, was the technology the same between decorated and plain pottery?

To answer these questions we must identify which wares were locally made and which were exotic. Basically, determining what is local strongly depends on studying the sourcing of materials. As mentioned above, 40 selected samples from Kueishan were subjected to composition analysis. Figure 5 presents a triangular coordinate composition diagram of the results. Apex A represents 100% quartz. In general, quartz is the matrix for all ceramics. Apex C indicates 100% shale, sandstone, meta-sandstone, and volcanic materials. Based on geological studies, the gravels in the Shihmen Conglomerate, Hengchun Peninsula, can be grouped into two categories: (1) those of quartz, schist, granite, sandstone and amphibolite and (2) those of gabbro, diabase, keratophyte, basalt, and minor rhyolite and dacite of oceanic origin (Page and Lan, 1983; Chen and Huang, 1985). Obviously, vessels made with these sources are local products. Apex B shows 100% slate. The analysis arbitrarily singled out slate for comparison, since...
slate does not naturally exist on the Hengchun Peninsula. According to geological surveys, slate is distributed north of Fengshan, to the west of Taiwan. To the east of Taiwan, slate is not found south of Taimali. (see Fig.2) Apparently, the vessels containing slate were not produced locally. The result is very interesting and noteworthy. To the east of Taiwan, slate is not found north of Fengshan, to the west of Kavalan and Paiwan are widely found in other Austronesian-speaking areas, such as Luzon, Borneo, Nias, Engano, Minahasa, Timor, Roti, New Guinea, Trobriand Islands, Solomon Islands, Marquesas, and in the Cook Islands (Chen, 1988:382). Logically, it is plausible to consider the relationship of this human figure designs as part of a “community of culture”. Moreover, the ideology and the role these vessels played varied within their respective societies are even more important than the vessels themselves. Actually, no ethnographic evidence documents that the Paiwan aborigines made their own pots. But pots were significant and recognized as ancestors by Paiwan and some other Austronesian-speaking peoples (Chen, 1968:122; Chiang, 1992:105; Kirch, 1995:143). Every pot has its own lineage. Although they are all made of clay, no two pots were made the same. The grammar of decorated ware from the Kueishan site seems to follow a similar ideology.

Other than ceramic remains, more than 30 glass beads and perforated wild boar tusks were discovered from multiple burials in the Kueishan site. These artifacts are also noted in existing ethnographic materials of the Paiwan, the Bunun, and the Atayal. Moreover, as Chen (1988:230) mentioned, among the Paiwan, the teeth of the leopard or cat was also perforated and used for making decorated objects. Coincidently, a perforated leopard-cat (Felis bengalensis chinensis) tooth was found at Kueishan.

Based on excavated archaeological remains, Kueishan ceramics occur on Kueishan, Hopishan, and Chulu, a region restricted to southern Taiwan. The dates of this culture can be traced back to 1,500 B.P. Additionally, 14 stone houses located on slopes in the eastern Hengchun Peninsula are thought to be the remains of ancient Paiwan dwellings. The dates of these remains are estimated to be between 700 and 300 B.P. (Li et al., 1985). While I would not argue that prehistoric Kueishan inhabitants were the direct ancestors of the Paiwan, it seems reasonable to hypothesize that both the Kueishan and the Paiwan have a common and old inheritance from early Austronesian-speaking individuals.

CONCLUSIONS

For over a century, archeological studies in Taiwan have yielded abundant materials. Yet most efforts have concentrated on establishing the cultural sequence of prehistoric Taiwan. In addition, studies of the Austronesian dispersal have concentrated on identifying the homeland in the southern part of mainland China from which around 6,000 years ago, small groups of agricultural settlers crossed the Taiwan Strait (Chang, 1986; Tsang, 1992; Bellwood, 1997; Blust, 1999). These groups were characterized by cord-marked pottery, polished stone adzes and reaping knives, slate projectile points, and baked clay spindle whorls. Beyond this, little attention has been paid to the dispersal of prehistoric inhabitants within Taiwan over the past 6,000 years.

Additionally, most ceramic studies have focused on classifying newly discovered cultural components. Few archaeologists have addressed issues of ceramic exchange and craft organization. Ceramic evidence can be used as an index of association between prehistoric cultures in Taiwan because it can provide evidence for the transport of materials from one area to another. We know that stone adzes made of basalt were commonly distributed in archaeological sites throughout the southwestern part of Taiwan and the Penghu Archipelago between 5,000 and 3,500 B.P. (Hung, 2000; Rolett et al., 2000). Following the same communication routes, it is hard to believe that Kueishan ceramics would not have had similar distributions for the same time period.

In this paper, I attempt to draw attention to two issues of ceramic studies in Taiwan beyond establishing cultural sequences. The first is the issue of imports and exchange on Kueishan, relating them to the principle that exchange systems are employed to overcome imbalances in resource distribution. The ceramics from different production localities present a high degree of heterogeneity. To resolve the problems that this raises, composition analysis should be emphasized to ascertain whether or not the materials comprising the ceramics are from local or distant sources. The second issue is that of continuity and change in inter-regional and intra-regional ceramic technology. Attention should be given to the aspects of manufacture, to the techniques of decoration, and to elements of the design systems.

In sum, the information presented herein may provide a broader contextual basis for investigation of the “community of cultures” in prehistoric Taiwan.

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