A New Prehistoric Ceramic Style in the Southeastern Coastal Area of China

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K. C. CHANG

For some years, archaeologists have recognized three successive major ceramic styles in the prehistoric period of the southeastern coastal area of China: namely, Cord-Marked, Lungshanoid, and Geometric (Chang 1964, 1972). Their chronological sequence, first established on stratigraphical grounds, is now further strengthened and specified by radiocarbon determinations published within the last decade (Chang 1975). In more recent years, a new ceramic style is beginning to be recognized, and its relationship with the other styles now deserves some close scrutiny.

The new style was first recognized in a small collection of potsherds from the island of Quemoy (Chin-men), in Fukien province of China. Ch’ao-ch’i Lin, geology professor at National Taiwan University, discovered the site during a geological survey of the island in September, 1968, at a shellmound known as Fu-kuo-tun ('Enrich Nation Mound'; the mound was originally referred to by local inhabitants as Hao-k’o-tun, 'Oyster Shell Mound'). Because his time was limited, Lin had the opportunity to collect only some potsherds and molluscan shells from exposed sections of the site and to excavate in a single 2 m \( \times \) 1 m test pit. The cultural deposits proved to be 60 cm deep, and the remains that were uncovered included at least 20 species of molluscs, a small number of potsherds, a single fragment of animal bone, a river pebble with pits produced by knocking, and a possible shell ornament (Lin 1970, 1973). Three shell samples from the site submitted to the Radiocarbon Laboratory of the Department of Physics, National Taiwan University, have yielded the following dates (Hsu et al. 1970):

<table>
<thead>
<tr>
<th>Sample</th>
<th>Stratum</th>
<th>Date (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTU-63</td>
<td>Upper stratum</td>
<td>5,460 ± 320</td>
</tr>
<tr>
<td>NTU-64</td>
<td>Middle stratum</td>
<td>5,800 ± 340</td>
</tr>
<tr>
<td>NTU-65</td>
<td>Lower stratum</td>
<td>6,310 ± 370</td>
</tr>
</tbody>
</table>

K. C. Chang is professor of anthropology at Harvard University.
When these are converted into dates based on the $5730 \pm 40$ half-life and the bristlecone pine adjustments (Ralph et al. 1973), they give the following ranges: 3940–4610 B.C., 4380–5080 B.C., and 4790–c. 5500 B.C. These are unusually large, because the probable errors of the determinations are unusually large. It is safe to say that the excavated part of the shellmound began its deposition around 5000 B.C. and was abandoned before 4000 B.C. The actual age of the shellmound, however, could be a relatively short period somewhere within the fifth millennium B.C.

The precise number of potsherds that were collected at Fu-kuo-tun is unknown. Lin's description of the sherds is as follows:

Potsherds: Wares are black or red; some are decorated, others plain. Since only a single pit was dug, I am reluctant to give any figures to their relative proportions. Most sherds are thick: The range is 4–7 mm, but most samples are 6–7 mm. The exterior and interior surfaces [of some sherds] are red, but the core of these sherds is black, suggesting that the firing was low. The decorated sherds are mostly shell-impressed and fingernail-impressed. Edges of shell were impressed on pottery to produce wavy lines, lines of dots, and straight lines. Those produced by impressing with fingernails consist of rows of short semicircles. In addition, there are incised horizontal strokes, diagonal lines, and horizontal rows and vertical short strokes. (Lin 1973: 38, trans.)

Lin's description had not been accompanied by photographs of the sherds. Rubbings of five sherds were printed with one of his articles (Lin 1970), but they do not give a clear enough view. Recently, Lin kindly arranged to enable me to photograph about a dozen of the Fu-kuo-tun sherds. With his permission, a photograph is reproduced here (Plate I).

It is clear from the photograph of the eleven Fu-kuo-tun sherds that here, in the fifth millennium B.C., was a ceramic style that is probably related to, but not identical with, the Cord-Marked style represented by Ta-p’en-k’eng of Taiwan (Chang et al. 1969: 166–170). There is a single cord-marked piece (Plate I, middle row, first right), but the principal mode of decoration is of the impress-by-means-of-a-comb variety. The “comb” was obviously a molluscan shell with a sawtooth edge, probably the Anadara granosa that has been identified among the shells in the middens. Impressing by means of fingernails was also common, and incisions by means of a single stick, principally to provide zoning borders, are seen on a few pieces. All available sherds are body sherds, insufficient for any discussion of form. But on the basis of decoration alone, one can state with considerable confidence that the Fu-kuo-tun ceramic type is at such variance with the types known under the Cord-Marked ceramic style that it may be considered as a new style altogether.

Insofar as I know, the Fu-kuo-tun ceramic style has not been found elsewhere in Fukien. A “combed pottery,” however, has long been reported by Rafael Maglioni in the Hai-feng (Hoifung) district of eastern Kwangtung in the 1930s. Father Maglioni’s earlier published works contained descriptions of a SON site, but it was not until 1975, when his major monograph, with illustrations, was published posthumously by the Hong Kong Archaeological Society, that detailed information about the site became available. According to his description,
Plate I  Potsherds collected at Fu-kuo-tun by Lin (1970).
All the pottery of Son is low-fired. There are various kinds, but only one, the sand-mixed cord type, resembles that of other sites; of this type, however, not many fragments are found in Son, and they do not show any special characteristic. A typical pottery common in Son and rare elsewhere is the "combed pottery"; it is thin sand-mixed, of reddish colour, and on the smooth or corded surface has irregular and wavy lines, evidently incised with a comb-like instrument. But the most characteristic pottery of Son is a black sand-mixed type, with a smooth surface and freehand incised ornaments on the neck and sometimes also below the neck. The incisions are very shallow, of fine, regular and delicate work, and seem to have been made with sharp points, combs, and shells, only on the rims and shoulders of the vessels. There are several kinds of lines, incised or imprinted, straight, curved and wavy, continuous and dotted, sometimes alternated with small circles, or arranged into triangular or other geometrical figures, with a great variety of designs showing an advanced artistic taste. (Maglioni 1975: 32)

Since Maglioni has not given a detailed report of the excavations at any SON sites, which are very few in number, I hesitate to take into account the stone and other industries reportedly associated with his combed pottery at SON itself. But insofar as this pottery is concerned, both his words and the pictures leave no doubt that it is in fact of a style identical with the find at Quemoy, about 200 km to the east along the same coast. The early radiocarbon dates of Fu-kuo-tun shells lend support to Maglioni's belief that his SON culture is the earliest of his Hai-feng Neolithic cultures.

The status of this new ceramic style—perhaps to be referred to as "Sha-k'eng Shell-combed" in due recognition of Maglioni's earlier discovery—in the southeastern coastal area of China is at this stage difficult to ascertain. Chronologically, the new style at Fu-kuo-tun occupies a millennium (fifth before Christ) that is within the life history of the Cord-Marked pottery style as represented not only at all Ta-p'en-k'eng sites in Taiwan but also at many known early ceramic sites in the Kwangtung coasts. The Ta-p'en-k'eng Culture of Taiwan is presumed to be of great antiquity, but the only available radiocarbon date comes from a site near Pa-chia-ts'un in the Kuei-jen district of T'ai-nan, which is $5480 \pm 55$ B.P. or $4350-4450$ B.C. as adjusted according to the bristlecone pine chronology (Chang 1973: 525). Very probably these two sites—Fu-kuo-tun and Pa-chia-ts'un—were occupied at the same time on both sides of the Formosa Strait. Although they are characterized by different ceramic styles, Fu-kuo-tun has also yielded cord-marked pottery (as has Maglioni's Sha-k'eng North), and Pa-chia-ts'un has both incisions made by combs and impressions of shells (Huang 1974: pl. IV). The outstanding issue now appears to be this: Are the Ta-p'en-k'eng and Fu-kuo-tun ceramic styles two ceramic variants of a single culture, or do they represent different cultures altogether? As the Ta-p'en-k'eng Culture now holds the key to the processes of the earliest Neolithic development in Southeast China, these are questions of the utmost importance in the prehistory of East and Southeast Asia.
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