



The Sarawak Museum Journal

Vol. XLV No. 66

December 1993



ISSN: 0375-3050

E-ISSN: 3036-0188

Citation: Ipoi Datan. (1993). The Analysis of the Earthenware Pottery. In *Archaeological Excavations at Gua Sireh (Serian) and Lubang Angin (Gunung Mulu National Park), Sarawak, Malaysia*. The Sarawak Museum Journal, XLV (66): 35-96

CHAPTER 3: THE ANALYSIS OF THE EARTHENWARE POTTERY

Ipoi Datan

The analysis of the earthenware pottery from Gua Sireh and Lubang Angin is presented in this chapter. Descriptions and analyses of fabrics, vessel shapes, rim forms and types of decoration are presented for the two excavated sites. This analysis will be along similar lines to those carried out by earlier researchers on the pottery assemblages from other sites in the region, such as Tanjong Kubor in Sarawak (Solheim 1965), Kupang and Sungai Lumut in Brunei (Omar 1981), and the Madai and Baturong sites in Sabah (Bellwood 1988).

In addition, some additional data are presented from the use, on selected sherds, of scanning electron microscopy (SEM), X-ray diffraction and neutron activation analysis. Some sherds from the Niah sites have also been included in these studies for comparative purposes.

CHAPTER 3

THE ANALYSIS OF THE EARTHENWARE POTTERY

The analysis of the earthenware pottery from Gua Sireh and Lubang Angin is presented in this chapter. Descriptions and analyses of fabrics, vessel shapes, rim forms and types of decoration are presented for the two excavated sites. This analysis will be along similar lines to those carried out by earlier researchers on the pottery assemblages from other sites in the region, such as Tanjong Kubor in Sarawak (Solheim 1965), Kupang and Sungai Lumut in Brunei (Omar 1981), and the Madai and Baturong sites in Sabah (Bellwood 1988).

In addition, some additional data are presented from the use, on selected sherds, of scanning electron microscopy (SEM), X-ray diffraction and neutron activation analysis. Some sherds from the Niah sites have also been included in these studies for comparative purposes.

THE EARTHENWARE POTTERY FROM GUA SIREH

The main material excavated at Gua Sireh in 1989 was pottery. A total of 4566 earthenware sherds (99.7 %) was recovered, as opposed to only 15 sherds (0.3 %) of imported ware, mainly Chinese ceramics (Table 8). The latter include blue and white, polychrome and green-glazed ceramics of late Ming and Qing date (18th to 19th centuries). I am very grateful to F.D. Bulbeck of the Department of Prehistory and Anthropology (Arts Faculty), ANU, who has kindly examined these tradewares. As the description of these imported ceramics is treated in his report (Appendix B) I will not discuss them any further in this chapter.

TABLE 8

**Totals for earthenware and imported ceramics
excavated at Gua Sireh in 1989**

	Earthenware	Imported ceramics
Trench 89A	3148	14
Trench EFG 8	1418	1
Totals	4566 (99.7%)	15 (0.3%) = 4581

EARTHENWARE FABRICS

Sherd breaks were examined under a binocular microscope at low magnification (10x-20x). The most common fabric has a dark to very dark grey core with surfaces ranging from light to dark grey or pale brown. Some sherds appear to have laminated sections perhaps resulting from paddle beating or from the addition of layers of clay during manufacture. Similar features have been noted in the assemblage from Tanjong Kubor (Solheim 1965:32). The fabrics vary in texture depending on temper materials, which range from fine mineral sands to angular gravels derived from several rock sources. Individual pieces of the latter can be up to 3 to 6 mm in size. Some sherds also have organic inclusions, including rice (see Chapter 6, Plates 39 & 40).

The presence of dark cores could indicate a high carbonaceous content incompletely removed during firing (Shepard 1968:21), although some vessels were fired to a uniform colour right through their thicknesses. The pottery was produced mainly by the paddle and anvil technique as the inner surfaces of the sherds have obvious anvil impressions, probably from the use of stone pebbles.

BODY DECORATION

Out of the 4482 earthenware body sherds excavated from Gua Sireh, 2608 (58.2 %) are plain while 1862 (41.8 %) are decorated. The main forms of decoration are all impressed, using carved, basketry-wrapped or cord-marked paddles. A few sherds were found with incised decoration or red slip (Table 9).

1. The different categories of *carved-paddle impression* are as follows:

- Parallel lines (PL) or ribbed patterns. These consist of parallel lines in relief, between 1 and 3 mm in width (Figures 17 e-f & 19 b, Plate 5). This type of decoration is applied vertically, diagonally or horizontally to vessel bodies and is similar to the Tanjong Kubor ribbed pattern (a) (Solheim 1965:7-8).
- Checked (XP) or crossed patterns (Plate 6). These consist of diamonds or squares with borders in relief. Some of these patterns could also perhaps have been made by a simple form of basketry wrapped around the paddle. The

TABLE 9

Totals of decorated body sherds in Trenches 89A and EFG 8

Trench	Basket-marked	Carved-paddle impressed					Cord-marked	Others	Totals
		PL	XP	HB	DM	FM			
89A	1107 (84.1)	44 (3.3)	103 (7.8)	10 (0.8)	6 (0.5)	6 (0.5)	37 (2.8)	3@ (0.2)	1316
EFG 8	226 (41.6)	98 (17.9)	146 (26.7)	52 (9.5)	0	0	22 (4.0)	2# (0.3)	546
Totals	1333 (71.6)	142 (7.7)	249 (13.4)	62 (3.3)	6 (0.3)	6 (0.3)	59 (3.2)	5 (0.2)	1862 (100 %)

@ 2 red slip decoration, 1 impressed concentric circles (Plate 11)

1 incised triangle and circle motif (Figure 14 b), 1 discrete rectangular impressed pattern (Figure 14 a)