

EARTHENWARE FROM A FIRING SITE IN MYANMAR (BURMA) DATES TO MORE THAN 4,500 YEARS AGO

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ABSTRACT

A radiocarbon date range of 2,890 to 2,470 BC for an earthenware firing site at Halin in Upper Myanmar (Burma) puts a solid timeframe around an assemblage that includes incised and burnished wares, and a spout. While earthenware is often found associated with burials in this region (Pautreau 2007 ; Pautreau, Coupey et al. 2010), this site provides a rare glimpse of early earthenware pottery production. Initial finds call for some reappraisal of approaches to Myanmar's material culture in the pre-metal and pre-urban periods.

THE EXCAVATION

Halin is best known as a walled urban site of the First Millennium AD (Myint Aung 1970), but recent excavations have revealed a palimpsest of Neolithic, Bronze and Iron period cemeteries (Hudson 2009; 2010). Outside the city walls, two kilometres southwest of the modern village of Halin-gyi, there are three mounds whose surfaces are covered with potsherd debris. In 2010 we put a test trench into one of the mounds (N 95.794667°, E 22.441159°), sampled the assemblage, and took carbon for dating (Figure 1).

This is not a kiln site. It was used for the open-air firing of earthenware. Similar layers of charcoal, ash, potsherds and soil appeared in mounds we have excavated at Bagan, which date to the 9th-14th centuries AD (Hudson, Nyein Lwin et al. 2001) and with communal village sites that are in use for firing earthenware in Burma today (Nealie 2003). This might suggest a long-term, continuing tradition of manufacture. Sample OZM357, from near the top of the mound, dates to 4,055 ± 35 BP. OZN200, from the middle layers, dates to 4180 ± 35 BP. OZM356, from the layer nearest natural soil, dates to 4,105 ± 30 BP. Calibrated at 95.4% probability (Bronk Ramsey 2002; Reimer, Baillie et al. 2009) the dates together fall within the range 2,890-2,470 BC.

THE ASSEMBLAGE SO FAR

Incised wares

The largest and most decoratively complex shard found in the test excavation is part of the side of a large vessel, with

diagonal incisions on the body (Figure 2). The pot has a neck of plain burnished black, framed by horizontal incised lines, from which extends a pattern of incised vertical lines.

The line decoration of the samples found so far is generally by incision (Figure 3). With one possible exception, there is no sign of the criss-cross pattern that can be obtained either by wrapping cord around a beater, or cutting a pattern into a wooden beater, and hammering the beater against an anvil inside the pot. There is a hint that the underlying layer of lines on one shard (Figure 4) may have been made with some kind of beater. This is overlaid with multi-directional incisions. One of the shards features finger-impressed castellation around the rim (Figure 5).

There were several small, thick-walled flat bases with incised decoration (Figure 6). These may have been small pots, but no matching upper portions were located.

Burnished black ware

Thin-walled 3mm thick sherds are made from a fine whitish paste and burnished grey/black (Figure 7).

Spout

A spout (Figure 8) suggests that spouted vessels have a long history in Burma before they appear in the First Millennium AD debris of monastic complexes (see, for example, Aung Thaw 1968). The shape of the vessel bearing the spout is not apparent from the shard.

Other finds

There were smooth, white quartz stones in the mound, similar to stones we have observed in the modern context being used for burnishing. Several pieces of deer antler were found, which may have served the same function. There were also some bivalve and gastropod shells (Fig 9). The gastropods are similar to shells found in an Iron Age midden layer, HL 30, which is two kilometres from our pottery mound. This habitation site sits above a Neolithic cemetery in which every skeleton is accompanied by a bivalve shell (Hudson 2010) similar to those found in our excavation.

SUMMARY AND IMPLICATIONS

We stress that this was a test excavation. A significant result is that the earthenware in this site can be dated convincingly within the calibrated range 2,890-2,470 BC. This is



Figure 1 Commencing excavation of the trench. Date ranges are shown at the levels that were sampled for charcoal.



Figure 2. Large incised and burnished shard.

important for future excavations as well as for any tentative interpretation of the initial finds. On the available evidence, we would like to put forward some propositions for consideration.

The presence of incised pottery in this timescale supports Bellwood's model of an expansion of agriculturalists from southern China (Bellwood 2005). If we jump ahead to the early First Millennium AD urban period, during which Tibeto-Burman speaking agriculturalists constructed brick walls and buildings, and adopted Indic concepts such as cremation and Brahmanic and Buddhist religion, it may not be necessary to posit the arrival of these people as migrants 2,000 years ago- perhaps they were already there.



Figure 3 Examples of incised patterning



Figure 4. Overlaid incisions



Figure 5. Castellation



Figure 6. Flat bases of containers

The diversity of decoration styles and fabric used points to an established industry supplying a diversity of community needs. We see objects here such as the spout and the burnished black ware that have not yet been found in graves at Halin, perhaps suggesting that grave goods, while not necessarily created as grave goods, may have been included for specific purposes, and are not a representation of the complete assembly.

A more complete excavation of this site would provide information about an early assemblage of incised earthenware, and facilitate both local and regional comparisons within a strong chronological context.

RESEARCH PROSPECTS

Halin is under the purview of the Shwebo office of the Myanmar Department of Archaeology. The archaeological site is about 5 hours northwest of Mandalay by road, and 90 minutes from Shwebo. Government archaeologists from Mandalay excavate there regularly, focusing on pre-urban burials and early urban structures. Several inhumation complexes are preserved as open excavations and site museums.



Figure 7. Burnished grey/black ware



Figure 8. spout (two views)



Figure 9. Shells

On-site caretakers are employed by the Archaeology Department to protect them.

International participation would be by arrangement with the Department of Archaeology, Museums and National Library, which is part of the Ministry of Culture. We suggest that future excavation of the pottery production site should involve a multidisciplinary team including artists,

photographers and ceramicists. At the time of publication there were no plans to do so.

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