PERSONAL ORNAMENTS IN THAI PREHISTORY: SOME PRELIMINARY OBSERVATIONS FROM NONG NOR, CENTRAL THAILAND

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ABSTRACT
The site of Nong Nor, Central Thailand, has been excavated over three seasons. Over 160 burials, dating to the Bronze Age, have been recovered and many of these had items of personal ornament (jewellery) included in their graves. Analysis of the jewellery is currently in progress and some preliminary results are outlined here.

INTRODUCTION
Detailed personal ornament studies have been of interest to archaeologists for some time (Beck 1927). Approaches have changed. For instance, Ceci (1989) identified three stages in the development of anthropological discussion of shell beads, spanning from 1840 till today and moving from an essential concern with creating inventories, through a more rigorously scientific approach, with better species identification and stricter stratigraphic control, to a concern with a “holistic” approach. This latest approach identifies shell beads as “sensitive markers for social, political, economic and ideational processes” (Ceci 1989:2).

For Southeast Asia, Pilditch (1986) has noted that prior to 1986 there had been no work aimed at gaining this overall view of the role of personal ornaments in prehistory. Her research was a first step in rectifying this, and it succeeded in a number of important respects. At a practical level, she set a standard for the description of ornaments, advocating a standardisation of terminology, and also demonstrated the need for careful laboratory analysis. However, her most important contribution was to introduce this holistic approach to the region.

Another recent example of such an approach is King’s Evolution of Chumash Society (King 1990), wherein 8000 years of social development are investigated, as well as the mechanisms of maintenance of neighbouring but distinct economic systems and ultimately, the process of colonisation, all based upon a thorough analysis of shell beads. Others have also used jewellery to address questions of colonisation (Mitchem 1991; Saitowitz and Sampson 1992) and socio-political structure (Kenoyer 1991, 1992). Trade/exchange networks (Bellwood 1976; Loofs-Wissowa 1980-81; Bennyhoff and Hughes 1987; Glover 1989; Rubinson 1991) and the technology of bead manufacture (Francis 1982; Williams 1984 referenced in Glover 1989; Stocks 1989; Carla 1990 referenced in Mudar 1993) are also topics which have been investigated.

Thus the study of personal ornaments (or jewellery) can be, and has been, used to address a wide range of archaeological and anthropological questions. This point has been highlighted because a holistic approach to personal ornament study forms the background for the observations about the Nong Nor artifacts which will follow.

NONG NOR
During January and February of 1991-1993 I participated in the excavation of Nong Nor. The site is a low mound located amongst rice fields to the northwest of the town of Phanat Nikhom, Central Thailand (see Figure 1) (Higham and Thosarat 1995).

Due to modern land boundaries the mound has effectively been divided in two, with one part largely undisturbed and the other having had up to 50 cm removed to bring it down to the level of the rice paddy. The latter part has been excavated.
Figure 1. Map showing the location of sites mentioned in the text.
Figure 2. Schematic representation of the Nong Nor stratigraphy (vertical exaggeration approximately 2:1).

Although some looting has occurred, excavations revealed this to have been localised in the western section of the excavated area. The stratigraphy began with a basal yellow clay (layer 3) which eventually angled down sharply to define the northern edge of the original mound. Specks of charcoal and burnt or subfossil bone were abundant at the surface of this layer and the top 10 cm or so held frequent agglomerations of clay concretions. Overlying this were patchy (1-15 cm thick) lenses of burnt red deposit, at present presumed to be a by-product of a local pottery industry. Lenses of concentrated pottery sherds were also present. Layer 2 comprised a shell midden, varying between less than 20 cm and more than 50 cm in depth, lensing out completely in some areas. In places, especially near the northern edge of the mound, the lower portion of the midden was interlaced with lenses of more of the red deposit. Finally, black alluvial flood plain clays (layer 1) capped the midden (see Figure 2).

This stratigraphic sequence had been disturbed by the digging of burials and skeletons were found in all layers, most of the better preserved examples coming from layer 3. However, since actual grave cuts were difficult to identify, except in layer 3, we cannot confidently state the level from which they were dug. Some grave cuts were identifiable in the midden, but even the best of these were very faint, indicating that others may well have gone undetected. It was not possible to identify burial cuts in layer 1.

The fragmentary and disturbed nature of many of the skeletons has made quantification of the burials difficult, but some preliminary figures are presented in Table 1. Most bodies were placed extended and supine with the hands crossed over the pelvis and with the head towards the east. A number of graves were devoid of skeletal remains. Figure 3 illustrates the general layout of burials within the excavated area.

Table 1. Age and Sex at Nong Nor (after Tayles nd)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Adult?</th>
<th>Children</th>
<th>Infant</th>
<th>No Bone</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>30</td>
<td>40</td>
<td>56</td>
<td>10</td>
<td>22</td>
<td>7</td>
<td>165</td>
</tr>
</tbody>
</table>

As well as personal ornaments, the most common grave goods were a variety of pottery vessels, potter's anvils and dog skulls. One burial included a cache of what appear to be copper-alloy arrowheads and another contained a number of shell bangle cores or blanks. Yet another had a bovid's horns placed around the skull. Other faunal remains such as pig, deer, chicken and fish bones, and large complete marine shells were also sometimes included.
The area of individual graves varied considerably both in relation to each other and to the size of the skeleton. If we assume, as Figure 2 suggests, that the burials were all dug from a similar surface, then grave depth was also a highly variable dimension.

Radiocarbon dates indicate that the initial activity at the site occurred at about 2478-2333 cal BC (1 sigma) (Higham and Hogg 1995:23). The interleaving lower stratigraphy, and the lack of any intermediate layers between the concreted clay and the overlying cultural de-
positions indicate that the midden is related to this date. On the other hand, the burials have been dated to between 1300 and 800 cal BC (Hedges et al. 1993) (Higham and Hogg 1995 support dates of 1100-700 cal BC; Charles Higham, pers. comm., prefers an early first millennium BC occupation). Some burials were located completely within layer 1, overlying the midden. The simplest explanation is that two distinct occupations occurred, the first represented by the burnt surface of layer 3 and the midden, and the second by the graves cut down from a now-removed surface. With a period of abandonment of approximately 1000 years we can assume no direct relationship between the two communities.

PERSONAL ORNAMENTS AT NONG NOR

The personal ornaments at Nong Nor derived almost exclusively from the burials. The following, therefore, will focus mainly upon this period of occupation. The ornaments have been divided into six main types based upon probable use; bangles, bracelets, earrings, necklaces, pendants and miscellaneous loose beads (bangles and bracelets, although used in essentially the same way, have been classified as separate types due to their distinctive construction – bangles are solid circlets, bracelets are made up of individual units such as beads).

The ornaments were manufactured from a variety of materials including shell (from both bivalves and gastropods), soft stone such as marble and serpentine, hard stone (carnelian), bronze and tin. Large canine teeth, identified as those of a tiger (Panthera tigris) and worked to become pendants, shark teeth (also pendants) and two glass beads were also found, the latter being surface finds. One disc bead, probably glass (Mason, pers. comm.), was found in direct association with human bone. Although disc shaped, the material matches the description of weathered mutisalah or “sealing wax” beads as given by Bronson (1990:223). In addition, it is of course both possible and likely that personal ornaments existed in more perishable materials, such as seeds.

The distribution of ornament types among burials of different age and sex is presented in Table 2. It is stressed that all the information and interpretations presented here are preliminary, including the sex and age determinations for individuals as well as the types and numbers of ornaments. However, some patterns do appear, and these bear closer examination.

Based on the overall numbers of burials in each category (see Table 1, unpublished data kindly provided by Dr. N.G. Tayles), the average number of jewellery items per burial has been calculated at the bottom of Table 2. These indicate comparable numbers of jewellery items in male and female graves. The corresponding figure for infant burials, however, is relatively high, in particular it is higher than that for child burials (infants are classified as aged between 0-4 years, children 5-14 and adults 15 and over [Tayles nd]). The low average for adult burials of indeterminate sex is almost certainly due to the poor preservation and disturbed nature of this group.

A closer look at the differences between male and female ornament assemblages shows that the shell type 1, stone type 2 and 3 and the bronze type 2 and 3 bangles are represented in male burials but not at all in female
Table 2. The distribution of ornaments by burial type at Nong Nor. The figures are counts of artifacts, not burials, therefore some figures are high not because the type is common across the site but due to a concentration in one burial.

<table>
<thead>
<tr>
<th>Type</th>
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<th>Infant</th>
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<td></td>
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<tr>
<td>Bangle</td>
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<tr>
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<td>1</td>
<td>2</td>
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<td>7</td>
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<td>7</td>
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<td>1</td>
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<td>1</td>
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<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>51</td>
<td>36</td>
<td>32</td>
<td>5</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>MEAN (per burial)</td>
<td>1.28</td>
<td>1.20</td>
<td>0.57</td>
<td>0.50</td>
<td>1.00</td>
<td>176</td>
</tr>
</tbody>
</table>

burials. This is interesting because within their material groups these are the more elaborate (and generally rare) forms. Of the stone beads the visually more striking carnelian beads are also associated with a male burial, as are the unique tiger canine and shark tooth pendants.

On the other hand, shell type 4, stone type 1 and bronze type 1 bangles are present in graves of both sexes. In contrast to the former group these bangles are less ornate, occur in greater numbers and appear to conform to standardised formulae. The shell pendants, which are all minimally worked and comparatively common, were also found in all grave categories.

The high average number of ornaments per infant burial is unexpected, although it is inflated by the inclusion of ten bronze bangles in a single burial. However, this association is uncertain as a number of burials, both adult and infant, are intercut at this location. Excluding this example then, the average number of personal ornament...
ments per infant burial would be comparable to that for children.

None of the shell earrings was found in burials. In addition their form differs from that of the stone earrings, suggesting that they date from the earlier middlen occupation.

PRELIMINARY INTERPRETATIONS

Based upon the above distribution pattern, some tentative interpretations can be offered. It was noted in the introduction to this paper that personal ornament analysis can be employed in attempts to answer a number of archaeological questions. The first such question to be consid

erved here is that of the social structure of the community that disposed of its dead at Nong Nor.

The pattern of ornament distribution suggests that status was acquired rather than ascribed. Child burials are on average less wealthy than adult burials; children have had less opportunity to acquire status. The presence of relatively wealthy infant burials is also suggestive; we can envisage parental use of infant mortuary ritual as an opportunity for conspicuous consumption serving their own aspirations for status, particularly if we accept that in many societies infants are not considered to have an independent social identity.

If we accept conspicuous jewellery as visible symbols of status or social importance, we can suggest that males were more prominent, as females appear to have been denied access to the more outstanding forms.

Support for the preceding conclusions can be found if we consider the nearby site of Khok Phanom Di (KPD). KPD predates the Nong Nor burial phase and has also been interpreted as indicative of a ranked society with individually acquired status, evidenced by the variable wealth within burial clusters (families) over time (Higham 1989).

There are also differences between the two sites which can help shed light on Nong Nor. For example, the richer burials at Nong Nor, at least in terms of jewellery items, appear to be male, whereas at KPD they are female. This indicates the existence of dissimilar social organisational principles in the two communities and perhaps a different cultural heritage. It is interesting to
note here that some differences also exist in the human biology of the two communities (Tayles pers. comm.).

Other factors may of course account for these differences. If we take into account the temporal dislocation between the two sites (a matter of at least 200, perhaps as much as 500 years) we can consider an alternative explanation. Renfrew (1986) has argued that the development of ranked society may occur in two stages. Initially, personal status is intimately linked with the ownership and display of symbolic “primitive valuables”. Later, however, these valuables become more prized as items for economic exchange; less prone to display but more prone to specialist production and standardisation. As stated by Renfrew (1986:162):

In this phase, rich burials may be less common than in the preceding one, and often quantities of mass-produced goods are now seen.

The seemingly richer site of KPD has a greater variety of personal ornaments (cf. Pilditch 1993) than Nong Nor, where the range is restricted and where at least two jewellery forms, stone bangle type 1 and bronze bangle type 1, show evidence of standardisation. The shell beads are less well finished at Nong Nor; King (1990) has noted less attention to detail as a feature of artifacts developing a more purely economic value.

Thus, the relative apparent poverty of the Nong Nor burials may be more a result of a different politico-economic developmental stage than a reflection purely of access to, and control of, local and exchanged resources. Higham (1989) has suggested that the richness of Khok Phanom Di stems from precisely such access and control; we are not in a position as yet to draw the same conclusion for Nong Nor.

Whether the KPD burials are actually richer than those at Nong Nor must, of course, remain a point of debate. For example, we cannot say whether the large bronze bangle of burial 105 at Nong Nor (a male) was representative of a lesser level of status than the 120,000 shell disc beads with burial 15 at KPD (a female). Comparing the ornaments of Nong Nor with those of other sites in Thailand, some tentative conclusions about contacts between sites may be drawn. For example, mention must be made of the similarity between the shell barrel beads of Nong Nor and those illustrated by Pilditch (1986) for Ban Na Di. Stone T-sectioned bangles at Ban...
Na Di also find parallels with the Nong Nor assemblage. You-di (1978) has illustrated a pair of stone earrings from Ban Don Ta Phet which are very similar to some of the Nong Nor examples and Mansuy (1902) illustrates shell artifacts similar to the Nong Nor shell pendants from Somrong Sen.

The five carnelian beads at Nong Nor may be the most interesting artifacts in terms of possible inter-site contact. They may be some of the earliest dated in Thailand (cf. Bellwood 1976). Two are barrel-shaped and drilled longitudinally with c.1 mm holes, indicating technology that Williams (1984, referenced in Glover 1989) has associated with diamond drill bits. It is widely assumed that such early hard stone beads were manufactured in India (Glover 1989; Bellwood 1976); the suggestion of diamond-bit technology would further substantiate this.

Based on the above it would appear that Nong Nor participated in an extensive exchange network. Future work should strive to understand the nature of this exchange from locating raw material sources and workshops to identifying the actual process of exchange (e.g. gift giving, or commercial trade).

Summary and Conclusion

It may seem that more questions than answers have been presented here. Archaeological analysis of any ritual is fraught with difficulties, largely due to the archaeological invisibility of much of the original ritual. We must, therefore, make the most of available evidence. At present we simply do not know enough about personal ornaments in Thailand, let alone Nong Nor, to confidently assess their significance in mortuary ritual or indeed any other contexts. The indications are, however, that at Nong Nor status was gained through personal qualities, and evidence for participation in an extensive exchange network is present.

Personal ornaments are often included in the "miscellaneous" or "small finds" category. I suspect that this is because their diversity in form and material makes them difficult to categorise and even to describe. There is no established tradition of analysis for jewellery unlike, for example, for pottery, adzes and fish-hooks. Pidtich (1986) has presented a glossary of terms for the description of ornaments in Thailand as has Kenoyer (1991) for the Harappan culture, but these have been isolated works. It is my contention that this research, if it is to be useful, needs to be anchored by a consensus on both method and theory. The minimum requirement should be a general agreement on terminology and on the aims and methods of jewellery research.

In real life, of course, ornaments are not isolated from other artifacts, still less from the rich complex of social and cultural associations. However, if we can isolate and understand ornaments apart, we can be more confident in our understanding of their roles in prehistoric society,
and thus what they might indicate about the life of people in prehistory.

ACKNOWLEDGEMENTS

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