

TRADE, TECHNOLOGY AND TRADITIONS: ANALYSIS OF A METAL AGE BURIAL FROM BOHOL, CENTRAL PHILIPPINES

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ABSTRACT

In 1998, a Metal Age burial site was discovered in Tagbilaran City, Bohol. The site was destroyed but the subsequent analysis of the recovered burial goods provides important comparative data on many aspects of early trade, technology and burial traditions in the region. The inventory of artefacts includes 78 earthenware vessels, over 1800 sherds, 130 glass beads, 31 iron tool fragments, 2 glass bracelet fragments and a few shell and stone artefacts. The quantity and variety of artefacts demonstrates that Bohol was an active participant in a regional network of maritime trade during the Metal Age. Numerous foreign goods reached the island, as well as locally and/or regionally produced Sa-Huynh Kalanay earthenwares. Moreover, a comparative analysis notes a marked increase in craft specialization and an overall trend towards variation and elaboration of burial traditions during this period.

Archaeological and historic research has documented politically complex and socially stratified societies in the Philippines by the late first millennium AD (Solheim 1981; Nishimura 1988; Junker 1994, 1998, 2000; Scott 1994; Bacus 1996; Patanne 1996). Located in coastal and lowland regions, these early polities were thriving ports and communities with complex economies and hierarchically organized societies. One of the commonalities noted among these early polities was their active participation in inter-island commerce and trade. Maritime trade is believed to have played an important role in the development of early trading kingdoms and chiefdoms throughout many areas of Southeast Asia, including the Philippines (Hall 1985; Solheim 1981; Junker 2002). Local elites used their ability to accumulate foreign 'luxury' goods as a means to consolidate political power in their communities. Foreign trade also

stimulated local economies by encouraging economic specialization and the manufacture and distribution of locally produced goods, as well as the expansion of trade networks among lowland and highland populations (Junker 2000).

Little is currently known about the evolution of early polities in the Philippine Islands. We first note many of the key characteristics of complex economies, such as the establishment of long-distance trade in goods and advances in technology and craft specialization, during the Metal Age. Maritime trade routes linked the Philippines to areas as far away as India and China by the early first millennium AD. During this period, the quantity and variety of trade goods increased significantly - most notable in the archaeological record was the introduction of metal and glass artefacts. Marked societal changes are also noted, such as an increase in wealth differentiation and an elaboration of burial practices.

The recent analysis of materials recovered from a Metal Age burial site on the island of Bohol has helped to broaden our understanding of the impact of trade and technologies on the early societies of the Visayan region (Central Philippines). It has demonstrated that Bohol was an active participant in early inter-island trade during the Metal Age. Similar artefact types, technologies, traditions and practices are noted with surrounding islands. Additionally, many unique artefacts and features are noted, suggesting some regional specialization. More detailed comparative research should help determine the individual nature and relationships of these early centers, as well as contribute to our overall understanding of the early economies of Southeast Asia.

THE ISLAND OF BOHOL/SITE DESCRIPTION

Bohol is the 10th largest island in the Philippines with a landmass of approximately 4117 km². It is located in the southern part of the Visayan group of islands, with the island of Cebu to the northwest, Leyte to the northeast and

Mindanao to the south. Geologically, much of the island is dominated by limestone and the southern coastline is fringed by extensive coral reefs and mangroves. The terrain varies significantly with broad valleys and low rolling hills in the north and more pronounced mountainous terrain dissected by deep gulleys and gorges in the south.

The burial site was located in a small rock shelter on the southwestern coast of Bohol in the Sitio of Kabisi, District of Ubujan, Tagbilaran City (Figure 1). This region contains extensive underground caverns and an irregular coastline with steep, rocky cliffs. The rock shelter was situated adjacent to the coastline at an elevation of approximately 5 m above sea-level.

The burial site was discovered in August 1998 during a construction project on the private property of Mr and Mrs Günter Gutknecht. The site was unearthed by laborers hired to construct a swimming pool at their private residence. Unaware of its significance, most of the site was destroyed by the laborers before the property owner was able to halt construction. As a result, the stratigraphy and context of the burial and artefacts were not recorded, but many of the artefacts were recovered and subsequently donated to the local museum where they are currently on display and stored.

METHODOLOGY

The analysis of the artefacts took place over a three-month period at the Bohol Museum in Tagbilaran City. The analysis was done by this author, with the assistance of Joselito Alipala, a researcher from the museum.

A detailed inventory was taken of all the recovered artefacts. The majority of the collection consisted of low-fired earthenware sherds. Many of these sherds were large in size and showed fresh breaks, as if the vessels were broken during removal from the burial; as a result, some vessels were able to be partially or almost fully reconstructed to their original form. The remaining earthenware sherds were counted, measured, weighed and classified based on stylistic and technological attributes such as sherd type, form, color and firing characteristics. Descriptive-stylistic attributes were based on traits defined by Solheim (1964) and expanded upon by Flavel (1997). Technological attributes were based primarily on classifications developed by Junker (1982).

The 130 glass beads were measured and classified by color, size, form and technology. The form and technological classifications were based on typologies developed by Santiago and Francis (Francis 1989a, 1989b, 1990a, 1990b). The metal tools were classified solely by form. Classifications were developed that were based on indigenous tool types, i.e., contemporary local tool forms. Due to the small quantity of shell and stone artefacts, no typological classifications were undertaken on these materials. Some basic data were also collected on the recovered human teeth.

In addition, one of the laborers who unearthed the burial(s) was interviewed to obtain some descriptive information on the stratigraphy and placement of the artefacts in relation to the skeletal remains at the site.

Finally, a comparative approach was used to understand the significance of the artefacts and site within a larger

regional context. Published and unpublished research and site reports were reviewed and numerous museum collections were cross-referenced. Future research may include a more detailed technological analysis of the earthenware sherds and/or beads to provide more precise data on the origins and/or relationship of these artefacts with others found throughout this region.

RESULTS

The inventory of artefacts indicates that the site dates to the Metal Age (400 BC-AD 900). The earthenware forms and styles, as well as the glass beads, bracelets and iron tools are all comparable to items recovered from other Metal Age sites in the region. Additionally, it lacks any evidence of stonewares or porcelains, which if present, would indicate that the site dates to a later age.

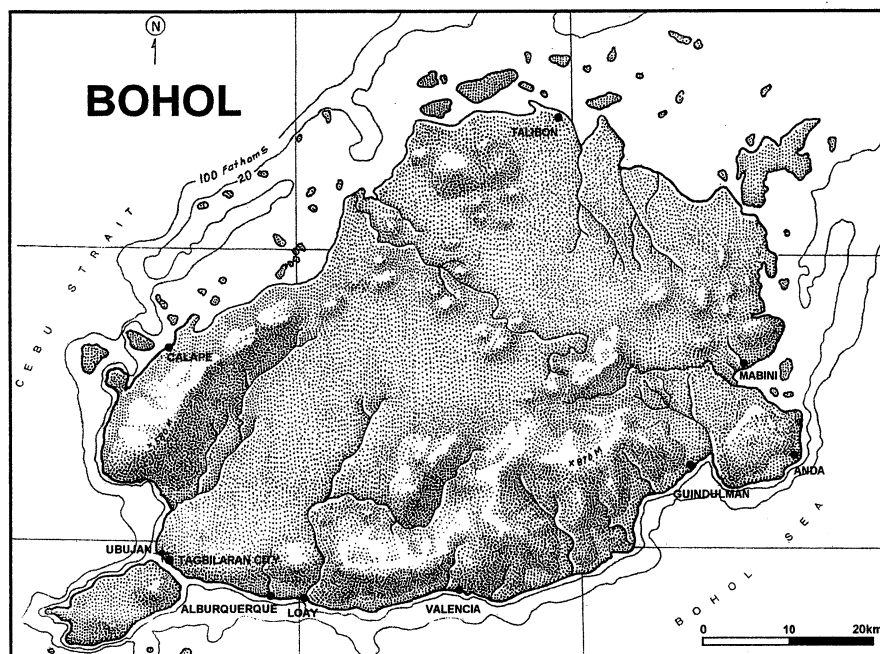


Figure 1: The island of Bohol, Central Philippines

The labourer who was interviewed provided valuable information on the layout of the site, discovered two years previously. Approximately 1 m below the ground the discoverers encountered an extended human burial surrounded by a large number of earthenware pots, glass beads, metal tools and human teeth. These artefacts appeared to be placed in specific groups. For example, the iron tools were grouped near the feet, most of the pots were located at the right side of the body and the footed vessels were located above the head. Somewhat deeper, at what may have been another cultural level, a few additional artefacts were recovered, including a few more earthenware vessels, glass beads and human teeth. This suggests that most of the artefacts were contemporary, but some may have dated to a slightly earlier period.

Due to the destruction of the site, it is not clear how many burials were represented, but we know that there was at least one extended burial and probably some associated jar burials. This interpretation is based on the recovery of the skeleton of an adult as well as the presence of a large quantity of human teeth from individuals aged 3-4 years old to adult. It is assumed that some of the jars were probably used for burials, as secondary jar burials were a common practice in this region at the time and teeth were commonly interred as part of this ritual.

Similar artefact types are found in other Metal Age burial sites throughout the Philippines, most notably, similar pottery forms and styles. These common elements include round-bottomed pots with carinations and bowls on ring feet or pedestals, often with cut-outs and perforations (Figure 2). Lips are sometimes scalloped or notched. These are all stylistic and decorative elements of what is often referred to as the Sa-Huynh Kalanay pottery tradition. Elements of this tradition are also noted throughout many areas of Island Southeast Asia suggesting that there was a widespread pottery industry and trade network at the time. A preliminary petrographic analysis of a small sample of the recovered sherds further confirms this interpretation. It appears as if a wide variety of clay sources were being utilized, originating from different geographic sources. A more detailed petrographic analysis may be able to help identify more precisely the geological origin of the clay sources and/or origin of the pots.

Several unique vessels were noted which may indicate a local tradition or the work of an individual potter. One was a small flat-bottomed, narrow-mouthed small jar, approximately 10 cm high and with a mouth diameter of 2.1 cm. There were also two four-legged vessels, of a type only documented from one other site in the Philippines, the Kalanay site in Masbate (Solheim 1964). Four-legged vessels have also

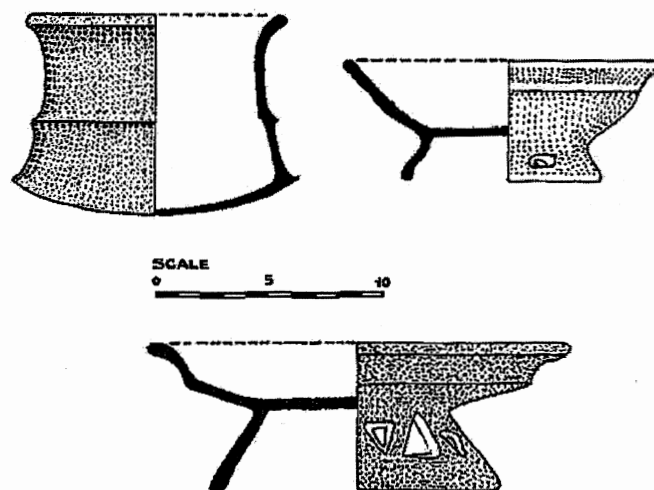


Figure 2: Examples of pottery recovered from Ubujaan (drawn by J. Alipala)

been sporadically noted in other Southeast Asian sites, e.g., in Sulawesi (Callenfels 1951).

Some other important artefacts at the site included iron tools, glass beads and two fragments of glass bracelets. The beads were all monochrome, predominately red and yellow. They were manufactured using two different technologies; some were wound and some were drawn. Drawn beads are generally identified as being manufactured in the Indo-Pacific region, while wound beads are usually identified as Chinese (Francis 1990a, 1990b). One bead that stood out in the collection was a 14-sided opaque orange glass bead, 10 mm in diameter. It may have been modeled after the more common faceted carnelian beads from India. Similar glass beads have also been noted in other areas of Southeast Asia, such as Oc-Eo (Malleret 1951), but overall, they are relatively rare.

The glass bracelet fragments are triangular in cross-section. One fragment is an opaque yellow glass and the other an opaque brick-red. Similar bracelet forms are known from Cambodia, Vietnam and Taiwan. The metal tools were made of iron and included forms that resembled knives, daggers, chisels and bolos.

In summary, the inventory of artefacts included 78 earthenware vessels, over 1800 sherds, 130 glass beads, 31 iron implements, 96 human teeth, 2 fragments of glass bracelets, a few shell and stone artefacts and some fragmented osteological remains.

CONCLUSION

The data collected from Ubujaan help fill in some existing gaps in our understanding of the prehistory of Bohol and

the Philippines. More specifically, they provide important information on the region's economic, social and cultural traditions during the Metal Age.

The beginning of the Metal Age in the Philippines is rather arbitrarily dated to 400 BC. The introduction of metal artefacts signals expanding participation in the region's maritime economy. This maritime trade brought many new and desirable goods, such as metal tools and glass beads, as well as an expansion of markets for local products. Inevitably, it also introduced new ideas, such as new technologies and possibly new ideologies and cultural beliefs.

Archaeological research and ethnohistoric sources have documented politically complex and socially stratified chiefdom societies throughout various regions of the Philippines during the Protohistoric Period (AD 900-1521) (Junker 1992, 1994; Bacus 1996; Nishimura 1988). These societies were dispersed throughout both the lowlands and highlands and relied on regular inter-community trade to secure basic resources as well as foreign, luxury goods. The development of chiefdom societies in the Philippines is believed to have considerable time depth, with the first evidence of considerable wealth differentiation dating back to the Late Neolithic and Early Metal Age, or approximately 1000 BC-AD 500 (Fox 1979; Solheim 1981). It is hypothesized that the expansion of maritime trade was one of the key elements fueling the reorganization of society during this period (Solheim 1981:60). As towns developed along key coastal and riverine points, internal trade within the country also developed for the distribution of imported goods (Solheim 1981:59). Trade favored the establishment of more permanent settlements that could secure the exchange of products along these established trade routes. Furthermore, chiefs used their ability to accumulate wealth as a source of political power, e.g., through ritual feasting, bridewealth payments and control of exchange. Junker (2000) points out that

intensified foreign trade appears to correspond chronologically with the emergence of more organizationally complex and territorially expansive chiefdoms in some regions of the Philippines, particularly those polities that were favorably situated for control of this wealth-generating trade (Junker 2000:4).

This research demonstrates that Bohol was no exception. Goods recovered from the burial confirm that early Boholanos participated in early inter-island trade and shared a similar historical trajectory with neighboring islands. Many similarities in artefact types and styles and burial traditions, are noted between Bohol and the islands of Cebu, Negros, Masbate and Mindanao. Similar artefacts are also recovered from sites as far away as Vietnam and Indonesia, also dating to the first millennium AD. For example, there are many striking similarities between the burial site of Magsuhot on

the neighboring island of Negros and Ubujan. Like Ubujan, the Magsuhot burial dates to the first millennium AD and was an extended burial containing a large quantity of earthenwares and other burial goods. Many of the artefact types and forms are practically identical to those recovered in Ubujan; however, each site had some very unique artefacts as well. Future research should help clarify the significance and/or relationship of these artefact types throughout the region.

It is only logical to assume that if goods were being acquired, then goods were also being traded. The large quantity and variety of earthenware types recovered at Ubujan, combined with the fact that good clay sources are readily available on the island, suggests that early Boholano's were producing earthenware pots for local use and trade during prehistoric times. Even today, there are several towns that produce traditional open-air fired pottery which is sold or bartered at local markets, and ethnographic and oral sources note extensive trade in pottery in the Visayan region into the early 20th century. Other early trade items probably included food and forest products and other perishable goods. For example, sixteenth century Spanish explorers reported extensive sea trade in fish, coconuts, coconut oil, rice, tubers, yams, wax, goat meat, honey, palm sugar, fruits, nuts and vegetables (Scott 1994) and a few traditional crafts and goods that are still produced and traded today include basketry, rope and salt.

This research has taken a long-term comparative approach to understanding the development of the early sociopolitical economy of the Philippines, focusing on the development of trade, technologies and traditions in the Visayan region. More detailed and in-depth research in this region should help clarify the individual nature of these centers and the complex trade relationships that existed among them.

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The Peopling of East Asia

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Edited by **Laurent Sagart**, Centre Nationale de Recherche Scientifique, France,
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