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The Butuan Archaeological Finds: Profound Implications for Philippines and Southeast Asian Prehistory.

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Recent archaeological discoveries in northeastern Mindano, Philippines, specifically in the vicinities of Butuan City, Agusan del Norte (Fig. 1), may well be unparalleled in Philippine and Southeast Asian pre/protohistoric research. The archaeological potential of the area is only now being realized, mainly because of the archaeological data generated recently by the activities of pothunters, limited systematic excavations by the National Museum, and analyses of archaeological materials during an ASEAN Workshop in Archaeological Excavation and Conservation held in November 1987.

Prior to the recovery of trade ware ceramics from Butuan City, the oldest known evidence for such materials in the Philippines dates to the Song Dynasty (960-1279 A. D.). The recovery of Yueh and Yueh-type wares from the midden layer of the Butuan sites is significant since it is indicative of earlier trading activity with other Southeast Asian countries, perhaps as early as the period of the Five Dynasties (907-960 A. D.). Wooden coffins buried with associated trade ware materials dating to the 15th century A.D. serve as direct evidence of the temporal range in which the Butuan sites were used, first as habitation areas and later as burial places (Peralta, 1980).

It was, however, with the recovery in the late 1970s of two large plank-built and edge-pegged wooden boats at the Butuan sites that the significance of the area to Philippine and Southeast Asian pre/protohistoric research, notably in the sphere of prehistoric maritime trade, was consequently realized (Peralta, 1980; Scott, 1981).

Gold panning activities in May 1986 followed by limited systematic archaeological excavations in the vicinities of the earlier finds (Cembrano, n.d.), resulted in startling revelations about the Butuan sites. The ASEAN Workshop confirmed the immense potential of the sites to Philippine and Southeast Asian pre/protohistoric research (ASEAN Report, 1987).

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This paper presents a summary of the new finds recovered at the Butuan sites and places them in relation to the important aspect of maritime trade in the Philippine archipelago during the protohistoric period. A brief historical account of the archaeological researches undertaken at the Butuan sites is presented and the significance of the Butuan archaeological finds to Philippine and Southeast Asian archaeology is discussed.

Butuan City, Agusan del Norte, has been the venue of illegal pot hunting activities since the late 1970s, when, in the course of constructing canals for the city's flood control program, the work crew of the Ministry of Public Works and Highways accidentally encountered buried wooden coffins. Subsequent systematic archaeological excavations by the National Museum in late 1976 included the recovery and conservation of two plank-built wooden boats and additional wooden coffins which had been reported to National Museum representatives by the pothunters since the wooden finds were not as monetarily rewarding as the trade ware ceramics.

The Butuan archaeological sites are water-logged, and the presence of other wooden plank-built boats in the vicinity of Butuan City was confirmed by soil probes. From 1981 to 1984 technical personnel of the National Museum undertook limited systematic excavations of the midden layer identified at the sites. In 1983 the animal and human bones recovered from the different excavations were analyzed.

From 1984-85 archaeological excavations were carried out at undisturbed areas for correlation with the earlier finds (Cembrano, n.d.). Pothunting activity in the area was so intense that large tracts of lands have been totally destroyed for archaeological purposes.

In May 1986, another type of destructive activity was reported from the Butuan sites - gold panning. The earlier excavation holes left by the pothunters were re-excavated, but this time at much deeper levels. Gold dust and fragments of worked gold were found in a silty clay layer ca. two meters below the surface and below the cultural layers. A rush ensued, resulting in greater damage to the sites.

In November 1986, the 3rd Intra-ASEAN Archaeological Excavation and Conservation Workshop were held in Butuan City. Participants included geomorphologists, archaeologists, and conservators from the five ASEAN-member countries. The data generated during the excavations and the results of the analyses of the archaeological materials have augmented the archaeological significance of the Butuan sites.

The Balangay Boats

Large wooden plank-built and edge-pegged boats were first found in the Butuan sites in the late 1970s. To date, a total of eight such boats are known to exist. Three have been excavated and conserved by the National Museum, one was totally destroyed by the gold seekers, and four are still 'in situ'. The prohibitive costs of conservation prevent the National Museum from retrieving the other important watercraft.

The first two balangays recovered have radiocarbon dates of 1630 \pm 110 years (or 320 A.D.) and 700 \pm 90 years (or 1250 A.D.), respectively. Balangay 1 is the oldest known pre-European watercraft to have been found in the Philippines. All the wooden plank-built boats recovered to date average 15m in length and 3m across the beam.

The excavated boats exhibit the characteristic edge-pegged method of construction which is typical of Southeast Asian boat-making technology. The planks are of one continuous piece, carved to shape and made of hardwood. Balangay 2 is made of a hardwood locally called "Dongon" (*Heretiera litorales*). The planks are pegged to the keel every 12cm by hardwood pins or dowels. These pins are 19cm long and are driven into holes in the edge of each board.

The most distinctive feature of the wooden planks is a succession of flat and rectangular protrusions or lugs which are carved from the same wooden plank on the upper side, i.e., on the inside of the boats. Placed exactly opposite one another on each plank, these lugs are 78 cm apart and have holes along their edges through which cords or lashing can be passed. The use of these lugs was confirmed by the recovery of cordage of "cabo negro" palm fibers. Their presence is an indication that this older ship-building technology was used (Scott, 1981).

It is noteworthy that there is no basic difference in the technology of boat-building in the first two dated balangays, suggesting the stability of this construction technique for over 900 years. Balangay 5, the third boat, which was recovered only, last November 1986, exhibits the same technological method of construction as the first two.

Other Archaeological Finds at the Butuan Sites

Recovered from the shell midden layer at the Butuan sites are large quantities of low and high-fired ceramic shards^{675~} metal artifacts in the form of gongs, ear pendants, bells,

projectile points and tangs; earthenware materials, which include those that are made into net weights and spindle whorls; and bones of chickens, pigs and deer, as well as marine and riverine shells. Brief descriptions of the above finds are presented below, collated mainly from the results of analyses undertaken during the ASEAN Workshop in November 1986.

Low-Fired Ceramics

The analyses of the low-fired ceramics fragments recovered from systematic excavations indicate that the different forms of earthenware were homogeneously distributed at the sites. The shards which were markedly visible and were the most distinctive forms in the assemblage are the two-eared basin and cooking pan, jars, frying pans, stoves, bowls and fishing net weights. Ranges of variation within each form were also noted. Below are the six forms identified and the number of varieties within each basic form:

Basic forms	Varieties
Globular pots	10
Jars	3
Frying pans	9
Stoves	3
Bowls	4
Fishing net weights	5

Noteworthy ceramic shards found at the Butuan sites are the white paste and stamped-design ceramics. The majority of these shards, however, have been recovered out of context as a result of pot hunting activities. The shards are described as white or greyish-white in color and fired at temperatures lower than 80 C. A detailed description of the form of the body indicates that:

The shards suggest a single type of vessel which is basically a pot with a globular body. The shoulder slopes down rather sharply but the body rounds off below toward the bottom which is slightly flattened. It is probable that the largest diameter of the body is low although one body shard suggested a spherical body. The neck diameter which is narrow, flairs outward abruptly to a flat-edged rim. The rim is always flat and square in cross section though there is a range in the amount of beveling down and outward, provided by the available shards, the vessel form does not include a foot rim or stand of any kind. One shard

which appeared to be a bottom piece has some of the stamped design partially erased due perhaps to the vessel being set upon its bottom when the clay was still plastic (Peralta, 1987: 170).

It was noted that the design motifs of these shards are varied, with each set of impressions being either a single motif or a set of repeated motifs. The different kinds of motifs include:

- 1) A deep “u” or “v”; one of the more commonly used single motifs. Normally forms a band around the pot’s shoulder.
- 2) More complex design motifs such as (a) series of interlocking spirals, (b) interlocking double parentheses, (c) concentric lines forming round cornered squares, (d) a set of short parallel lines, and €a basketry design in one-under, two-over weave pattern.

The pottery is definitely not of Philippine, manufacture; it could have made its entry through the southern part of the archipelago as a product of the maritime trade in the region, between the 13th and the 15th centuries (Peralta, 1987: 172).

High-Fired Ceramics

High-fired ceramics recovered at the Butuan sites include Chinese trade wares dating to the Five Dynasties (907-960 A.D.), the Song Dynasty (960-1279) and the Ming Dynasty (1366-1644); as well as Thai, Vietnamese and Middle Eastern trade ceramics .

Analyzed trade ware ceramic shards from systematic excavations indicate that the largest number of shards date to the Song Dynasty, with a few pieces dating to the earlier Five Dynasties. A number of Sukhothai celadon shards were also recovered, and a 9th to 10 century Middle Eastern stoneware shard was found associated with the Chinese and other Southeast Asian trade ware ceramics. Identical Middle Eastern stone ware shards have also been found in Kedah, Malaysia, and at Takuapa, southern Thailand (ASEAN Report, 1985).

The majority of the stone ware shards analyzed exhibit yellowish-brown and greyish-green glaze. These have been identified as belonging to the Five Dynasties type of ware. White ware shards recovered are also identified as five Dynasties type, a number of which have been classified as Yueh/Early Song pieces.

Most of the high-fired ceramic shards analyzed were used for utilitarian purposes as jars, plates, saucers and jarlets.

Evidence of Metal Working at the Butuan Sites

That metal working was a craft specialization at the Butuan sites is indicated by ample archaeological evidence. It is unfortunate, however, that a large number of the finds were the product of unsystematic pot hunting.

In May 1986, gold panners in search of worked and unworked gold fragments in the area of the Butuan sites invariably encountered archaeological materials, the presence of which is indicative of metal working and glass bead working and reworking. The recovered materials include:

- 1) More than 100 pieces of intact clay crucibles,
- 2) Wooden tools in the shape of a pincer, a pick and a knife,
- 3) Fragments of worked, unworked and (possibly) reworked glass beads,
- 4) Metal artifacts made of iron, bronze, lead and gold in the form of an adze, a basin, bells, a blade, a buckle, a cymbal, ear pendants and others,
- 5) Worked stone and clay artifacts in the form of gold melting slag,
- 6) Iron slag,
- 7) Lead waste, and
- 8) Gold fragments (worked and unworked).

The crucibles, direct evidence of smiting activities at the Butuan sites, are of two kinds:

- 1) Type I: This is bowl-shaped with a spot on the rim. From 6-10 cm in diameter and 6-8 cm in height, these are formed without the aid of a wheel and are found in black, brown or grey color. The clay is mixed with fine or coarse sand and shell fragments. The surface of the exterior wall is rough as a result of mineral drippings characterized by red, yellow, black and brown colors. The interior walls are normally black or gray, and the texture of the surface is smooth.
- 2) Type II: This is dish-like in shape, and the functional part is formed by a shallow and concave depression, sometimes elliptical in shape. These are basically fragments of shards used as melting discs. The size is smaller than the first type, 4-6 cm in diameter and 1 cm or less in thickness.

Based on the dripping, it is suspected that the Type I crucibles were employed for bronze and iron melting while the Type II crucibles were used for gold smithing. It has been noted that the Type II crucibles are always found associated with gold dust or fragments.

Three types of wooden tools, which may be directly linked with gold smithing activities at the Butuan sites, have been recovered. Unfortunately, these are not found in archaeological context. These materials include:

- 1) Pick: About 14.5 cm long, tabular in shape; one tapers to a blunt point. May have been useful in separating gold dust and fragments from impurities.
- 2) Knife: Shaped like a knife; may have been useful for cutting.
- 3) Pincer: A tweezer-like device which may have been useful for removing gold products from the crucibles while they are still hot.

Pieces of glass-like iron slag, the residue of metal working, have also been found at the Butuan sites, but not in context. These slags serve as additional indicators of smithing activities in the area.

Numerous metal artifacts of various kinds were recovered from the Butuan sites, as mentioned. The different types of artifacts found at the sites are as follows:

- 1) Iron: adze, blade, knife, projectile points and tangs.
- 2) Bronze: basin, bell, cymbal, ear pendants, ferrule, flat dish, gongs, and mirror mounting.
- 3) Gold: buckle, ear ornaments, and rings.

Glass beads of various shapes, colors and sizes have been found at the Butuan sites. Although the beads analyzed are all, except one, of glass, other raw materials may have been used in addition to the stone (quartz) bead that was identified. Bead reworking is suspected to have been done at the Butuan sites, as indicated by the recovery of incomplete beads in various stages of manufacture and also by the presence of multi-colored drippings in some Type I crucibles.

Animal Remains from the Midden Layer

A considerable variety of animal remains were recovered from the midden layer at the Butuan sites. The majority of these finds were noted to be meal discards or food refuses. These include shells of both marine and brackish species; bones and vertebrae of sea animals

such as sharks, large fishes and sea turtles; and bones and teeth of terrestrial animals including chickens, pigs and deer.

Aside from merely being food refuse, some of the bone materials may have also been utilized as ornaments and tools by the inhabitants of the area.

Implications of the Butuan Finds

The data generated from the analyses of the archaeological materials recovered at the Butuan sites have profound significance for Philippine and Southeast Asian prehistoric research, mainly in the sphere of prehistoric maritime trade, metallurgy and its attendant consequences and the availability and other trade items.

The recovery of plank-built and edge-pegged wooden boats at the Butuan sites, two of which have radiocarbon dates of 320 A.D. and 1250 A.D., attests to Filipino ingenuity in boat-building and seamanship. These skills are still practiced and can be observed at the present time. Spanish historical accounts affirm these Filipino nautical skills, and early 17th-century Spanish dictionaries of Philippine languages corroborate the vital role of seamanship in historic Philippine society, as indicated by the rich vocabulary having to do with seafaring and seamanship. The technology of boat manufacture as demonstrated by the Balangay finds is one that has been known from as far as “Scandinavia to the South Pacific, from the third century B.C. to the present time in a few remote islands” (Scott, 1981: 30).

Due to the archipelagic nature of the Philippines, boats must have had a vital role in transportation, commerce and social contacts among population centers during the pre-and protohistoric periods. Findings from various land archaeological sites in the country dating to the protohistoric period suggest the existence of a trade network entailing commodity exchanges with an established clientele. The trade of material goods in bulk over large expanses of water enhanced the establishment of coastal communities which are highly nucleated and densely populated. The maritime trade that flourished in the Philippines during the protohistoric period included local exchanges among settlements, the movements of people across bodies of water and the retail distribution of trade ware ceramics throughout the archipelago. Evidence for this redistribution of trade goods by means of boats also comes from names of islands; local dialect terms directly used in maritime trade and the recovery of originate from Bohol Island. The discovery of a sunken vessel with its 15th century cargo

intact at Puerto Galera, Mindoro, and the ubiquitous distribution of trade ceramics in the Philippine archipelago also serve as impressive evidence of Filipino merchandising skill.

The evidence for metal working at the Butuan sites is overwhelming but, at this time, still incomplete. Definitive statements on the metallurgy await firmer archaeological data based on “in situ” finds and through metallurgical analyses and metallographic examinations of the metals recovered at the sites to elucidate the specific activities of metal manufacture, use and trade in the area.

The recovery of diverse animal remains at the Butuan sites at the Butuan sites indicates the existence of mangrove and secondary/primary forests at the time of occupation of the area as well as the wide range of food resources available. Based on the variety of shell and other marine animal bones recovered, it is apparent that the marine and riverine resources were extensively exploited. Hunting and food gathering were supplementary modes of food procurement.

One aspect of prehistoric maritime trade in the Philippines that has not been extensively investigated is the role that gold played as a trade item. That one of the main reasons for the presence of a large protohistoric population center in Butuan was the availability of gold, in fairly large quantities, is indicated by the recent gold finds. The recovery by present-day gold panners in Butuan of seemingly unlimited quantities of gold—both worked and unworked, may be a clue to the pre-16th century large-scale exploitation of this precious metal, in northeastern Mindanao resources available at the time definitely had their own worth, but the high value of gold as a trade item, then as now, is unquestioned.

The diversity of commodity goods recovered at the Butuan archaeological sites, i.e. high-fired ceramics, low-fired ceramics including white paste and stamped design ceramics, glass beads, and metals including iron, bronze and gold, all attest to the active participation of Butuan, in particular, and the various population centers of the Philippine archipelago, in general, in the thriving maritime trading activities in Southeast Asia during the pre- and protohistoric periods.

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