

POLITICAL ECONOMY AND INTERACTION AMONG LATE PREHISTORIC POLITIES IN THE CENTRAL PHILIPPINES: CURRENT RESEARCH IN THE DUMAGUETE- BACONG AREA OF SOUTHEASTERN NEGROS

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ABSTRACT

Current archaeological evidence from sites throughout the Philippine archipelago suggests the presence of complex polities (e.g., chiefdoms) by at least the beginning of the second millennium AD, during what is referred to here as the late prehistoric period which ended with Spanish contact in the sixteenth century (e.g., Hutterer 1986; Ronquillo 1987; Junker 1990). Recent archaeological investigations at the Tanjay site and surrounding Bais region sites in southeastern Negros (Hutterer and Macdonald 1979, 1982; Hutterer 1981; Macdonald 1982; Junker 1990, 1991, 1993), and at the Cebu City site, Cebu Island (Nishimura 1988, 1992) have been aimed at elucidating the nature of sociopolitical complexity and evaluating dynamic models of the organization and economy of complex polities. Currently, I am conducting related research focused on chiefdom political economy and interpolity interaction using historic accounts of the contact period and archaeological evidence obtained in 1988-89 as part of the research project I directed in the Dumaguete-Bacong area of southeastern Negros, as well as data from several earlier studies (Bacus in prep). Analysis of the archaeological materials is still in progress. In this paper, I will present a brief summary of the research, and will focus primarily on the theoretical framework guiding this project including a discussion of the several models of political economy being evaluated and of how these models can provide a context for understanding and investigating interchiefdom interaction. In addition, I will summarize evidence from Spanish historical accounts on the political economy and interpolity interactions of contact period polities. Finally, I will present a brief summary of the archaeological fieldwork from the 1988-89 season.

MODELS OF CHIEFDOM POLITICAL ECONOMY

Before presenting models of chiefdom political economy it is necessary to briefly discuss the concept. The term "chiefdom" is generally used to denote non-state political formations with ascriptive hierarchical ranking. Three primary defining characteristics of chiefdoms can be recognized: regional scale of integration, centrality of decision-making, and ranking/stratification (Earle 1987:288-291). Following Wright (1977, 1984), I use the term more specifically to refer to a ranked/stratified sociopolitical entity which has a centralized decision-making hierarchy which "is externally specialized vis-à-vis other activities, but not internally specialized in terms of different aspects of the control process" (1977:42), and as a result, generally has no more than two levels of control hierarchy above the level of the local community. Chiefs are the central directors in this hierarchy, which again, is set apart as specialized leadership but internally is undifferentiated as to function. There is a varying scale of complexity in chiefdoms (e.g., differentiated for heuristic purposes into simple-complex, ranked-stratified) and a range of variability is recognized in the levels of control hierarchy, as well as in the degree of regional integration and ranking/stratification.

These defining characteristics enable chiefdoms to be archaeologically and historically identified by such material correlates as the presence of a hierarchy of settlement types and sizes¹ (Wright 1984), differentiation in wealth and social inequality of residential housing (Wright 1984), differentiation in mortuary remains (i.e., specific status symbols which cross-cut other dimensions of achieved status) (e.g., Peeble and Kus 1977; Wright 1984), differentiation in access to economic resources (e.g., Powell 1988), size of population and territorial ex-

tent of polities (e.g., Steponaitis 1978) and so forth (see Earle 1987). Such material correlates of chiefdoms will be sought in the analysis of the archaeological remains (discussed below) from the Dumaguete-Bacong area.

Before continuing, I wish to stress that attributing a chiefdom level of sociopolitical organization to a particular archaeological entity is viewed not as an end in itself. Rather, it provides a means for framing appropriate research questions, for identifying relevant cases for comparison and models for testing, for investigating variability, processes of development and decline, and so forth.

Political economy, within the context of complex polities, refers to how ruling elites control the acquisition and distribution of wealth and staple goods to support the distribution of power and vice versa (Brumfiel 1992:558). Of the number of models of the organization of chiefdom political economy which have been presented by various archaeologists and ethnologists, I am specifically concerned with several that deal with the craft/wealth sector of the economy. These are Wright's tributary model, Frankenstein and Rowlands' prestige goods model, and D'Altroy and Earle's wealth finance model. Although similar, these models differ somewhat in the proposed locations of wealth/craft production and in the types of valuables redistributed by the ruling chief; consequently they have different archaeological implications.

Wright's tributary model (1977:381-2, 1984 [named such by Welch 1986:13]) proposes that tribute in the form of food and goods is extracted from producers. A portion of these craft goods is redistributed by the chief to lesser nobility, and not to the entire populace (cf. Service's [1971] redistribution model), with each receiving the same set of items (Welch 1986:15-16). These distributed items are goods imported from other polities or goods made by specialists, either part-time specialists locally supported by commoner production or full-time specialists supported by chiefs using some of the tribute extracted from producers. What differentiates this model from the following models is that the production of craft items takes place only at the level of the local communities (Peebles and Kus 1977; Wright 1977).

In the prestige goods model of Frankenstein and Rowlands (1978:76-8), which is a model of the process of hierarchization from which a specific model of the organization of chiefdom economy can be extracted, the ruling chief controls access to wealth objects obtained through external exchange. Some of these are then distributed by the chief as status insignia, funerary goods or bridewealth to lesser elites in order to support his superordinate status and gain political advantage. The rul-

ing chief also controls the production of wealth items at the local level and at the chiefly center for those goods requiring specialized skills, and controls specific local resources, all of which comprise the sources of wealth used in external exchange. The resources procured and wealth items produced at the local level differ among the settlements and are passed up as tribute through the political hierarchy to the paramount chief. The chief uses a minimal quantity of these local wealth items to distribute to lesser elites. In this model, production of prestige goods and/or procurement of valuable resources occurs at two levels: at the local settlement level, with settlements producing or providing different products, and at the elite settlement in the case of goods requiring specialist skills which are then produced under the centralized control of elites. Also in contrast to the tributary model, the paramount distributes only minimal quantities of prestige goods (but not valuable resources) within the polity to lesser elites, and only a subset of the foreign prestige goods.

In D'Altroy and Earle's wealth finance system model (D'Altroy and Earle 1985; see also Brumfiel and Earle 1987; Johnson and Earle 1987; Earle 1991), valuables are also employed by ranking chiefs as a means of payment to lesser elites for political services. These valuables may be produced at the level of the local community and amassed as direct payments, or produced at the paramount center by craft specialists attached to the chiefly elite. Raw materials given as tribute are often used in the manufacture of these goods with craft specialists also provided as part of the labor obligation from local communities. Unlike in the previous model, local communities may produce or provide the same valuables or raw materials. In contrast to Wright's model, valuables may also be produced at the center. Wealth objects may also be procured through long-distance exchange (Earle 1991:3), and special goods may be manufactured for exchange with polities that manufacture or control desired valuables/resources.

These models share a view of the ruling chief as central in organizing specialization and exchange, the products of which the chief then uses to create and maintain social inequality, strengthen political coalitions and enhance power by attracting clients and allies, and fund new institutions of control (Brumfiel and Earle 1987:3). Yet political economy can incorporate other forms of interpolity interaction in addition to exchange, and these are viewed here as also central to, and interlinked with, chiefly political economy. Thus, interpolity interactions involving relations of alliance can be viewed as important to the maintenance of the political economy in pro-

viding access to prestige goods, allies for warfare, chiefly marriage partners, etc. Interactions among chiefly elites may also include, as suggested by considerable archaeological and historic evidence, participation in a shared interpolity symbolic system where certain symbols mark alliance as well as status and legitimize authority. Examples of this include Mississippian chiefdoms (Brown 1976 cited in Earle 1987:283), Late Neolithic chiefdoms in the British Isles (Earle 1987:284), Caribbean chiefdoms (Helms 1987), the Olmec (Grove 1984; Pyne 1976 cited in Earle 1987:287; Flannery 1968; see also Earle 1990) and Chavin (Earle 1987:287) (see also Hantman and Plog 1982:243-4). Since style embodies meanings that are part of the symbolic system, this may take the form of a shared stylistic system. Interpolity interactions may also involve hostile relations such as warfare and raiding (Wright 1977:382). These may likewise serve to finance the political hierarchy through the acquisition of an additional labor force or of resources that may be used to increase the prestige of ruling chiefs by increasing their capacity for generosity (Brumfiel 1992:557 citing Santley 1980:142 and Gilman 1981; Helms 1979:32).

In order to describe the organization of the wealth sector of the political economy of late prehistoric polities in southeastern Negros and evaluate these contrasting models, a number of specific questions need to be examined. These include: What are the local prestige goods? Where are local prestige goods produced and how are they distributed within the polity? How is this different from the production and distribution of utilitarian goods? Is there evidence of craft specialization, and if so, at what level(s) of the hierarchy is this located and how are these goods distributed? How are non-local prestige goods distributed? Before providing a summary of the archaeological research that provides the primary data to address these questions, I will briefly discuss my analysis of Spanish accounts that examined these questions for the early historic period. This analysis provides a more specific Philippine context for these models of chiefdom political economy and interaction, and an historic baseline from which to understand the immediately preceding late prehistoric period

CONTACT-PERIOD POLITIES: POLITICAL ECONOMY AND INTERPOLITY INTERACTION

With the arrival of the Spanish in the Philippines in 1521, and especially after 1565 when Spanish rule was imposed, accounts of various kinds were written about the Philippines. These historical records provide data for reconstructing aspects of the political economies of some of the complex polities that existed during this time, as

well as information on the forms of interpolity interaction. The accounts examined date from 1521 to the mid-1600s (translated and published in Blair and Robertson 1903-1906, primarily volumes 1-35 covering 1521-1650; Filipiana Book Guild 1965; Jocano 1975; Garcia 1979) (see Bacus in prep for detailed discussion).

The Spanish accounts suggest that chiefs and their political activities were financed through the mobilization of tribute in the form of agricultural and other products; labor services performed by commoners and "slaves"; fees and payments for various services they performed; and maritime expeditions for intra-archipelago exchange, long distance trade, and raids (e.g., Pigafetta 1521 (1975):54-65; Loarca 1582b (1975):93; Plasencia 1589b (1975):109; Scott 1982). While the accounts provide some information on the political economies of various Philippine polities, unfortunately, they are not sufficiently detailed to adequately evaluate the above models of chiefdom political economy for the contact period, particularly in regards to locations of craft production² and chiefly distribution of goods as political payments. However, they do indicate some chiefly distribution of those goods acquired in maritime exchange, raids and warfare to elite and non-elite, particularly to those who served on their vessels (e.g., Loarca 1582a(1903):147-9). In addition, Spanish accounts provide some information on craft goods and specialists, and the degree to which these and other valuables were under chiefly control.

A number of craft goods and craft specialists are mentioned; specifically, goldsmiths who produced gold ornaments and jewelry worn only by the chiefly elite,³ iron- and other unspecified smiths (Vera *et al.* 1586 (1903):206; Boxer Ms. n.d. (1975):197, 229-230; Alcina 1688 (1960):104), carpenters and ship builders (Loarca 1582a (1903):79; Vera *et al.* 1586 (1903):206; Morga 1609b (1904):114; Boxer Ms. n.d. (1975):197, 229-30), and textile production including the use of laborers ("slaves") to spin and weave cotton into cloth for the elite (Sande 1577 (1903):98; Artieda 1573 (1903):203; Loarca 1582a (1903):73; Anonymous 1572 (1903):171; Artieda 1573 (1903):203; Loarca 1582a (1903):43; Dasmariñas 1591 (1903):84; Morga 1609b (1904):79; Alcina 1668 (1960):145). Accounts suggest that at least some of these goods were produced under chiefly sponsorship of part-time and full-time craft specialists.⁴ In fact, the majority of the craftwork described in documents was goods produced for chiefly elite consumption (although not necessarily exclusively), including use in chiefly controlled interpolity exchange and foreign trade (i.e., outside of or with those from polities outside of the ar-

chipelago).⁵ Some goods, such as types of earthenware, appear to have been under chiefly control in their use in exchange (Loarca 1582a (1903):121-122) and as a good distributed by chiefs (Loarca 1582a (1903):161), but in general probably were not under controlled production. In addition, some resources/foodstuffs valuable in exchange and foreign trade, specifically, gold ore (Anonymous 1566 (1903):229; Morga 1609a (1979):285; Fajardo 1620 (1904):159; Medina 1630 (1904):279),⁶ raw cotton,⁷ rice and beeswax (Alcina 1668 (1960):124), appear to have been under varying degrees of chiefly control, acquired either directly by their own "slaves" or received as tribute.

Accounts indicate that a number of types of interpolity interactions (referring specifically to within the archipelago) were engaged in by early historic polities, all of which appear to have involved or been controlled by the chiefly elite. These included exchange, the delivery of prestige items for the explicit purpose of creating and/or maintaining political alliances (Sande *et al.* 1578-1579 (1903):241-242, 293; Ribera 1579 (1903):287-288; Aduarte 1640 (1905):277; Vega 1609 (1904):281-326), feasts and rituals, intermarriage among the chiefly elite of different polities which was often based on political considerations (see Diaz's account cited in Keesing 1962:151-2; Chirino 1604b (1904):294-5), and raiding and warfare.

Exchange occurred among intra-island⁸ and inter-island polities, the latter involving voyages which were controlled, organized and financed by chiefs (e.g., Saavedra 1527-1528 (1903):42; Labecares *et al.* 1565 (1903):186; Legazpi 1565 (1903):209; Lavezaris *et al.* 1567 (1905):216; Legazpi 1567-8 (1903):238; Anonymous 1570 (1903):91; Loarca 1582a (1903):47, 101, 105, 121; Dasmarinas *et al.* 1591 (1903):84; Dasmarinas 1592 (1903):289; Morga 1609b (1904):102, 106, 115, 128; Concepcion 1624 (1904):309; Messa y Lugo 1624 (1904):89; Anonymous 1626 (1904):116; Mediana 1630 (1904):282; Grau y Monfalcon 1637 (1905):80; Aduarte 1640 (1905):92, 193; Colin 1663 (1906):87; Dampier 1697 (1906):30-31). Spanish and earlier Chinese accounts indicate that interpolity exchanges involved locally manufactured valuables (e.g., fine earthenwares, elaborate textiles, iron weapons and gold ornaments), and exotic items of wealth obtained in foreign trade (Anonymous 1565-7 (1903):142; Legazpi 1567-8 (1903):238; Legazpi 1569 (1903):57), as well as food products (e.g., rice, sugar, livestock, fish) and valuable raw materials (e.g., cotton, wax, iron and other metals) (Anonymous 1570 (1903):91; Loarca 1582a (1903):113; Dasmarinas *et al.* 1591 (1903):84; Dasmarinas 1592 (1903):289; Morga 1609a (1979):287; Morga 1609b

(1904):106; Bobadilla 1640 (1905):295). Interestingly, the goods having value in exchange and foreign trade were those local craft goods and resources restricted to, and/or under some level of control by chiefs, and imported foreign goods which were also under chiefly control via their control over coastal ports and sponsorship of long-distance trade expeditions (see also Riquel *et al.* 1574 (1903):243, 245; Keesing 1962). Exchange entailing inter-island voyaging involved an exchange of valuables between the chief of the port and chief/leader of the vessel prior to the commencement of more commercial transactions (Pigafetta 1521 (1975):56). This appears to have been an important element in creating and maintaining the alliance relations necessary for regular maritime exchange between distant coastal polities.

Chief/elite-sponsored feasts and rituals of various kinds (e.g., for the birth of a chief's child, illness, marriage, death, for agricultural harvests, construction of a chief's house, warfare, maritime raids) involved chiefs and elite from other polities (Anonymous 1572 (1903):164; Loarca 1582b (1975):93; Plasencia 1589b (1975):119-120; Chirino 1604a (1975):129, 134-5; 145; Bobadilla 1640 (1905):293-5; Colin 1663 (1906):65, 67-8, 75-6, 81-2, 89-90; San Nicolas 1664 (1904):137-139; Boxer Ms. n.d. (1975):190, 201, 207-9, 213-4). Some, for example, those occurring at the settlement of hostile interpolity relations, clearly served to create interchiefly alliances, whereas others may have well served to reinforce existing alliances. These feasts and rituals would have been important for creating and maintaining exchange relations and for obtaining allies for warfare which would serve to decrease hostile relations that could damage or destroy a polity's economy.

Finally, accounts suggest a high frequency and widespread occurrence of interpolity raiding and warfare (e.g., Anonymous 1565-1567 (1903):145-146; Legazpi 1569 (1903):55; Anonymous 1572 (1903):157; Lavezaris 1574a (1903):286-287; Lavezaris *et al.* 1574 (1903):264-265; Sande 1576 (1903):69, 81; Sande *et al.* 1578-1579 (1903):176; Loarca 1582a (1903):117, 149-151; Mendoza 1586 (1903):145; Plasencia 1589a (1903):174; Dasmarinas 1591 (1903):159; Tello 1598 (1904):170; Chirino 1604b (1969):391; Morga 1609a (1979):292; Mediana 1630 (1904):195; Arce 1635 (1905):105; Diaz 1635-36 (1905):152-153; Aduarte 1640 (1905):276-278; Boxer Ms. n.d. (1975):225-6). Maritime raids were organized and financed by chiefs, and their aims appear to have been disruption of the local economy of other polities, including competitors for foreign trade (Lavezaris 1574a (1903):287; Loarca 1582a (1903):151), and the acquisition of valuables (e.g. metal weapons, gold and

other precious metals) and resources (including slaves and foodstuffs) (Malleri 1986). This information suggests that raiding and warfare were used by chiefs as economic alternatives to exchange and trade.

One form of interaction mentioned earlier as expected among allied chiefs is participation in a shared inter-chiefly symbolic/stylistic system. Since a number of the interactions described required and/or served to establish alliances among Philippine polities, it is expected that shared interelite symbolic systems would have been expressed in these contexts. Spanish accounts do clearly indicate that throughout the archipelago, chiefs and chiefly elite were materially and behaviorally differentiated from others in dress and ornamentation (e.g., garments of silk, gold jewelry, ornaments of precious stone and gold-pegged teeth were worn only by chiefs) (e.g., Pigafetta 1521 (1975):50-51, 58, 64; documents from 1559-68 resumé by Blair and Robertson 1903:120; Morga 1609a (1979):269-272; Boxer Ms. n.d. (1975):196-197, 217), by elaborate residences containing local and foreign valuables (e.g., porcelains, gold dishes and ornaments, weapons, imported textiles) (e.g., Pigafetta 1521 (1975):49-50, 58-59; Morga 1609a (1979):295; Scott 1982:113), prolonged and elaborate mortuary rituals and burial practices, and by other elaborate rituals and feasts (e.g., Anonymous 1572 (1903):165; Loarca 1582a (1903):153-161; Loarca 1582b (1975):94; Plasencia 1589b (1975):120; Chirino 1604b (1969):301, 328; Colin 1663 (1906):65, 180-181; Boxer Ms. n.d. (1975):190, 201, 213-214). Beyond these symbols of chiefly rank, however, it has not been possible to determine if allied chiefs participated in a specific shared stylistic system.

The evidence from early Spanish accounts as summarized here indicate that most, if not all, recorded types of interpolity interactions involved, or were controlled by the chiefly elite. Furthermore, these appear to have been important to the political economy of chiefly polities. These interactions created and maintained alliances necessary for exchange and the acquisition of various types of valuable goods required by chiefs to manage their economies and use as political payments; for increasing the success of warfare/raids against non-allied polities; and for protection against hostilities which could damage or ruin the economy, and hence, the chiefly polity itself. Hostile interactions also resulted in the chief's acquisition of wealth items, valuable resources and slaves, in addition to disrupting the economy of competing polities, and would have also served in financing a chief's political activities. Thus, the early historic evidence appears consistent with the approach proposed here of situating

interpolity interactions within the context of chiefly political economy. As noted above, this evidence also provides an historic baseline which will be useful for archaeological interpretation.

ARCHAEOLOGICAL INVESTIGATIONS IN THE DUMAGUETE-BACONG AREA

The primary archaeological data used in this study of chiefdom organization, political economy and interaction derive from systematic survey and excavations in the Dumaguete-Bacong area of southeastern Negros (Figure 1). This area, encompassing 30.25 km² (Figure 2), was originally selected for systematic survey and excavation to investigate possible agricultural terraces, identify "sites", and to test several of the identified habitation sites for the purpose of developing a chronology for the area, evaluating late prehistoric sociopolitical organization and examining the relationship between agricultural intensification and the political economy of late prehistoric polities in this area. Although the investigation of the possible terraces was not possible to complete due to time constraints, the data are still appropriate for investigating prehistoric polities in this area and non-agricultural aspects of their political economies.

This area was systematically surveyed which involved gridding a topographic map and aerial photos of the 0-100 m elevation portion of the area into 500 x 500 m units. Those units located within the c.10-100 m elevation zone, which roughly corresponds to the distribution of the terraces, were grouped into 13 east-west oriented transects 500 x 2500 m in size; transects were deemed a more efficient unit to survey than the smaller units, and appropriate for investigating the expansion of the terraces. Three of these transects were systematically selected and surveyed. In addition, 12% (3 of the 21 surveyable 500 x 500 m units) of the coastal area (i.e., 0-c.10 m elevation zone) was surveyed. In all cases, all cultural materials were mapped and collected. The survey recorded 72 "sites" (i.e., fields with artifact scatters) which ranged in size from 500 m² to c.4 hectares, most of which probably represent multi-component occupations. The artifacts recovered from the survey include sherds of earthenware and Asian tradeware vessels (e.g., blue and white porcelains, celadons), lithics, metal artifacts, bone, shell and a few identifiable Spanish and modern artifacts. Since a non-site survey approach was used, the definition of sites awaits the completion of the chronological and spatial analyses of the artifacts. Once this is completed, estimates of site size, descriptions of site assemblages, etc. can be made. The results of these analyses, along with those of the materials from the ex

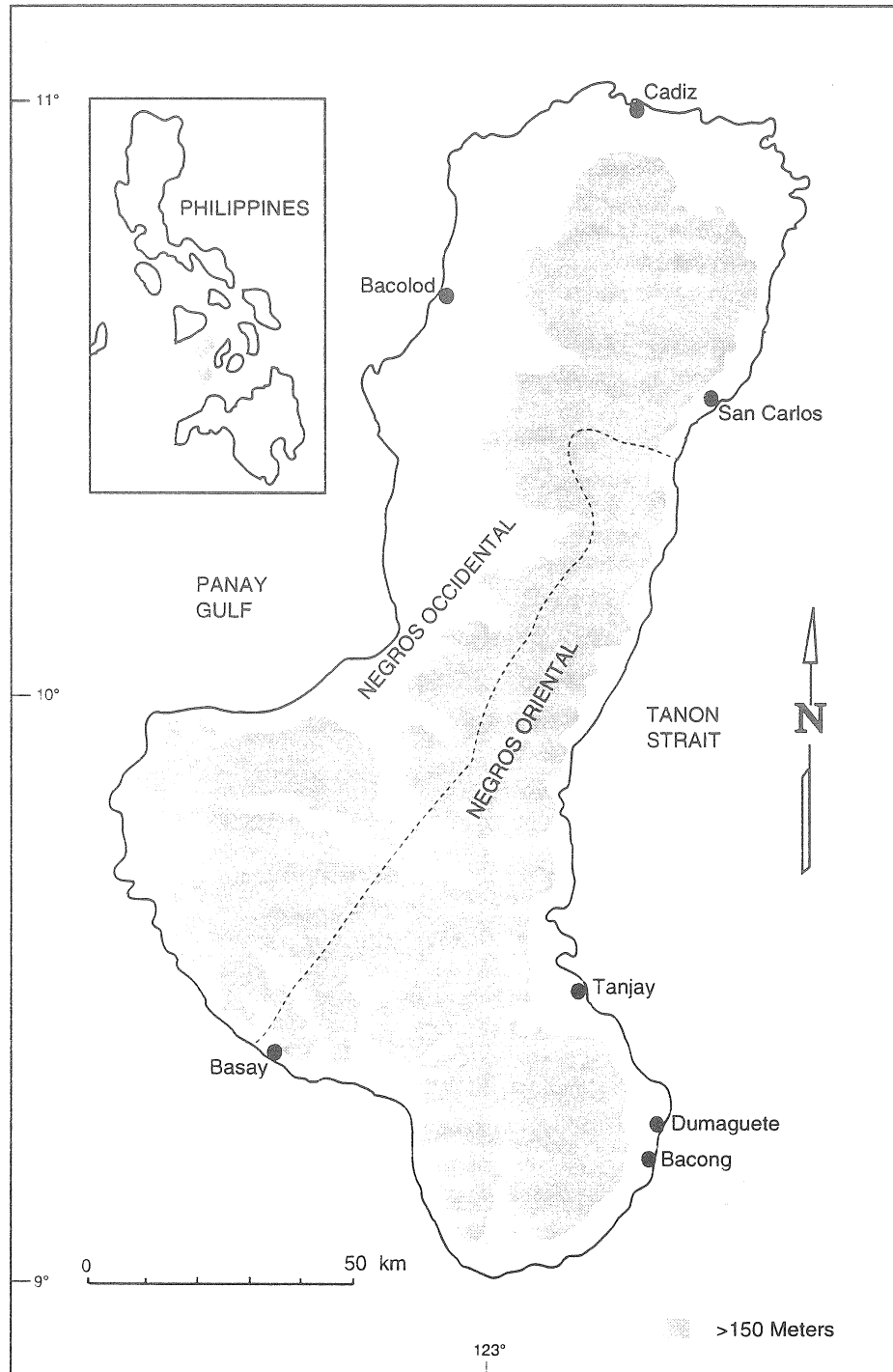


Figure 1: Dumaguete City and Bacong on the island of Negros

cavated sites, will be used to identify settlement hierarchies for evaluating the nature of sociopolitical complexity in this region, investigating economic organization, the distribution of foreign and local prestige goods, and so forth.

The Unto site (Figure 2), identified during the survey, was selected for excavation based on the decorated earthenwares. The design elements on these wares suggested considerable time depth which would aid in the construction of a ceramic chronology, and were also similar to widely distributed wares (e.g., Kalanay) which would potentially provide information on the organization of exchange and craft production. The site is located c.3 km west of Dumaguete City and c.1 km south of the Dumaguete River, and is at c.40 m AMSL. It is situated on a gently sloping alluvial fan which originates from the east flank of the Cuernos de Negros volcano. The site appears to be at least 1 ha in size, although preliminary examination of survey material from surrounding fields suggests a larger area of occupation. Thirty-five square meters of the site were excavated, uncovering midden deposits and 23 habitation features.

Three of four calibrated AMS dates (Table 1) on charcoal from three of the features and the presence of earthenwares dated to the fifteenth to sixteenth centuries (Junker 1990) indicate two periods of occupation; the earliest dating to the mid-1st century BC and the later to the fifteenth to early seventeenth centuries AD. The mid-1st century BC assemblage is comprised almost entirely of earthenware sherds (the majority of which are plain although there are some fine red-slipped wares and a few decorated wares). One ware type contains a few of what have been preliminarily identified by the author as carbonized rice husks. Nine features date, on the basis of radiocarbon determinations or presence of distinctive earthenware technological types identified in the radiocarbon dated features, to this period. The features include one postmold and eight pits of various sizes with all except one of the pits containing earthenware sherds, charcoal and/or other burnt organic material. The fifteenth to early seventeenth centuries AD assemblage is comprised primarily of plain and decorated earthenware sherds. In addition, a small quantity of metal fragments, slag, shell, lithics, bone fragments, porcelain sherds (blue and white), burnt clay lumps and a clay pipe fragment were recovered. Fourteen features date, again on the basis of radiocarbon determinations or presence of distinctive earthenware technological types identified in the radiocarbon dated features, to this period of occupation. These include seven postmolds; six pits of various sizes, five of which contained earthenware sherds, charcoal and/or

burnt clay lumps; and one possible feature which is comprised of a solidified layer of as yet unidentified material.

The Yap site (Figure 2), located within Dumaguete City, was located during survey of the coastal plain. The portion of the site identifiable from surface materials is situated 200 m from the ocean and 200 m from the Dumaguete River. This site was selected for excavation based on the similarity of its coastal and riverine location to large late prehistoric political centers in other parts of the Philippines (e.g., Tanjay, Cebu, Manila) which suggested its potential significance as a similar center of a complex polity, and on the presence of fourteenth century Asian tradewares which indicated some temporal depth to the site. Based on the surface distribution of artifacts, the site is at least 4 ha in size, although it is clear from various subsurface finds in and around Dumaguete City that it extends well beyond the surveyable area. Twenty-four square meters of the site were excavated, uncovering midden deposits and 16 habitation features.

Five calibrated AMS dates (Table 2) on charcoal and the presence of dated Asian tradewares (twelfth to sixteenth centuries blue and white porcelains, celadons; Ayutthia earthenwares) and dated earthenwares from the Bais region (Junker 1990) indicate two periods of prehistoric occupation; the earliest dates to the eleventh century AD and the later to the fifteenth to sixteenth centuries AD. There are also deposits stratigraphically below those of the fifteenth to sixteenth centuries and above those of the eleventh century which may date to the twelfth to fourteenth centuries. Although there are no radiocarbon dates for the latter deposits, they have yielded earthenware technological types identified at the Tanjay site (Junker 1990) and dated to the twelfth to fourteenth centuries. In addition, Asian tradewares of this period were found on the surface suggesting occupation in this period. No *in situ* deposits dating to the historic period were uncovered.

The eleventh century assemblage consists primarily of earthenware sherds, the majority of which are plain. In addition, two glass beads, slag, metal, one lithic item, numerous burnt clay lumps, and bone and shell fragments were found. One earthenware type contains what has been preliminarily identified as carbonized rice husks (R. Ford pers. comm.). Five features, all postmolds, were uncovered within the strata radiocarbon dated to this period of occupation.

A seriation of the recently identified earthenware technological types from the upper strata is currently in progress and should help to more adequately differentiate the deposits possibly dating to the twelfth to fourteenth

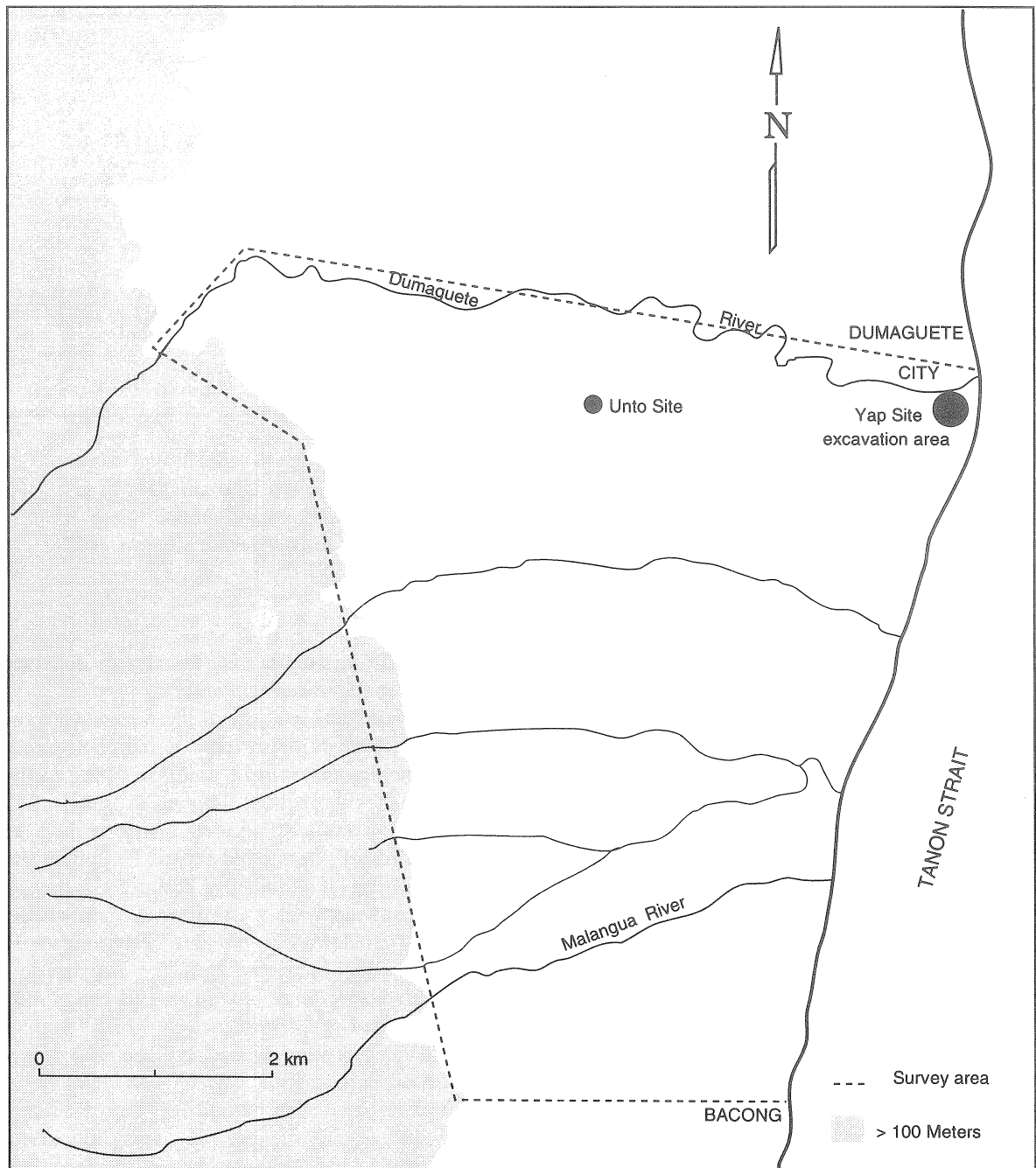


Figure 2: Location of the Unto site, excavated area of the Yap site, and the Dumaguete-Bacong survey area

Table 1: Radiocarbon determinations from the Unto site (VII-88-T₃)

SAMPLE NO.	CONTEXT	¹⁴ C AGE*	CALIBRATED INTERCEPTS ¹ (1 SIGMA AGE RANGE)
Beta 39606 ²	Feature 3 - pit (depth 86 cm)	2030±65	BC 31, 18, 9 (BC 100 - AD 60)
Beta 39607	Feature 3 - pit (depth 93 cm)	2205±105	BC 342, 320, 203 (BC 390-100)
Beta 39608	Feature 12 - pit (depth 56.5 cm)	325±60	AD 1527, 1553, 1633 (AD 1480-1650)
Beta 39609 ³	Feature 15 - pit (depth ~80 cm)	200±60	AD 1672, 1781, 1795, 1950, 1946, 1953 (AD 1650-1950)

* On charcoal

1 Calibration from Stuiver and Reimer (1993) with ranges rounded to nearest 10 years as they advise.

2 Beta 39606 and 38607 yied C14 dates that are statistically the same at the 95% level and have been averaged using Stuiver and Reimer (1993)which produces a calibrated intercept of BC 60 (BC 170-0).

3 The date from this sample indicates recent atomic contamination and has been eliminated from further consideration.

centuries from those of the fifteenth to sixteenth centuries. It is not possible at this time to discuss the respective assemblages and features in detail. In general, the assemblage from these later periods consists primarily of plain and decorated earthenware sherds, in addition to burnt clay lumps, one glass bead, slag, bone fragments, lithics, shell, pipe fragments, Asian tradewares and metal fragments. Six features were uncovered from within the deposits of these later periods of occupation and include two postmolds; three pits of various sizes, two of which contained earthenware sherds, charcoal and/or bone fragments; and one feature comprised of a high concentration of decomposed metal. Five features, located in culturally sterile soil could not be dated. All appeared to be postmolds.

Various analyses of the cultural materials from the excavations and survey are currently in progress. In addition to those mentioned above, analyses include:

1. Technological analysis of the earthenware ceramics from dated contexts at the Unto and Yap sites to define distinctive types (i.e., distinctive primarily in terms of a number of temper attributes) which will provide the basis for a regional ceramic chronology.

This will be used to date the surface collected earthenwares found during the survey.

2. Morphological analysis of the earthenware rims from dated contexts to develop a morphologically-based chronology that may be useful in dating earthenwares from sites throughout the central islands. More specifically, this will be used to try to date decorated earthenwares from other central Philippine sites without relying on attributes of design for dating purposes.
3. Intra-site analysis of various artifact classes (e.g., Asian tradewares, possible earthenware prestige goods, slag) recovered from the Yap site to investigate whether there is evidence of status differentiation, craft production, etc. which may indicate whether this site represented a center(s) of a polity(s) located in this area.
4. Intra-regional distribution of the various artifact classes among all sites (i.e., those identified during the survey and the two excavated sites) to aid, for example, in identifying prestige goods, evaluate economic organization, and evaluate the several political economy models.

Table 2: Radiocarbon determinations from the Yap site (VII-88-Y₃, -Z₃, -F₃)

SAMPLE NO.	CONTEXT	¹⁴ C AGE*	CALIBRATED INTERCEPTS ¹ (1 SIGMA AGE RANGE)
Beta 48666 ²	midden (N110E124, depth 62 cm)	1015±65	AD 1018 (AD 980-1150)
Beta 48669 ³	miden (N91E133, depth 32 cm)	955±65	AD 1039 (AD 1020-1170)
Beta 48671	midden (N99E93, depth 87 cm)	850±70	AD 1218 (AD 1060-1280)
Beta 48668	midden (N89E133, depth 64 cm)	980±55	AD 1028 (AD 1010-1160)
Beta 48670	Feature 1 - posthole (depth 107 cm)	1030±55	AD 1014 (AD 980-1030)

* On charcoal

1 Calibration from Stuiver and Reimer (1993) with ranges rounded to nearest 10 years as they advise.

2 All C14 dates (excluding Beta 48669) are statistically the same at the 95% level and have been averaged using Stuiver and Reimer (1993) which produces a calibrated intercept of AD 1030 (AD 1020-1150).

3 The date from this sample is inconsistent with the stratigraphic sequence and associated artifacts and has been eliminated from further consideration.

The portion of my research aimed at investigating interaction as political economy is concerned with two forms of interaction; prestige goods exchange and shared interelite stylistic systems. The database for this is comprised of decorated earthenwares recovered from the Unto and Yap sites in conjunction with wares from the Tanjay site, Bais region sites, Cebu City site, and various other sites located on a number of the central Philippine islands (including Siquijor, Talong, Leyte, Negros, Bohol, Palawan, Samar, Cebu, Masbate, Mindanao) excavated or surface collected in the 1920s (see Guthe 1922-25, 1928). Some of the decorative designs on the earthenwares under study appear to belong to what Solheim (1964) has defined as the Kalanay pottery complex and Bau pottery complex, both of which are found in sites located on a number of Philippine islands. Previous researchers have suggested that these stylistic ware groups exhibit a high degree of standardization in decorative treatment possibly indicative of their production by part-time craft specialists located at a limited number of manufacturing centers and distributed via intra-

archipelago exchange (Solheim 1964; Hutterer 1977:188-189; Hutterer 1986:6). However, as mentioned above, material exchange is not the only explanation for widespread stylistic similarity. Originally thought to date to between c. 250 BC and AD 900 (i.e., the "Iron Age"), the Unto excavations as well as the recent excavations at the Cebu City site and Tanjay site, date a number of varieties of Kalanay and Bau wares to the fifteenth to early seventeenth centuries AD and one possible Kalanay variety to the twelfth to fourteenth centuries AD. These dates, as well as Junker's (1990) and Nishimura's (1992) analyses of the Tanjay and Bais sites and Cebu City site, respectively, suggest their production and use as prestige items restricted in their distribution to primary and secondary political centers of complex polities. The current study of the decorated wares involves analysis of design elements and structure to assess statistically the degree of similarity among the various assemblages, and analysis of technological and morphological attributes to determine whether some or all of the wares represent specialized production at one or more centers, or perhaps a shared

style among chiefly elite. In addition, I am also examining the context and distribution of the decorated wares found among the Dumaguete-Bacong area sites to assess their possible role as local prestige goods and as part of the evaluation of the political economy models.

CONCLUDING REMARKS

To recap, my current research, as briefly presented here, is concerned with evaluating the nature of the sociopolitical organization of late prehistoric polities in the Dumaguete-Bacong area of southeastern Negros, their political economy, and the forms of interaction they were engaged in (i.e., material exchange and/or shared interelite symbolic systems) using data from systematic survey, excavation, and earlier surface collected and excavated materials from a number of sites throughout the central Philippines. Current archaeological evidence indicates the existence in areas of the Philippine archipelago (including the Bais region north of Dumaguete) of complex polities by at least AD 1000, and thus deems appropriate the use of models of complex social formations, such as of chiefdoms, in investigating the archaeological record of large late prehistoric coastal sites, both alone and within their regional contexts. Spanish accounts, documenting the end of the late prehistoric period, also indicate the existence of complex polities, and lend support to the approach taken here of situating interpolity interactions within the context of chiefly political economy. The results of the various analyses of artifacts and spatial patterns as they relate to these questions will be presented in the near future.

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NOTES

1. For example, the settlement hierarchy for simple chiefdoms will be comprised of one level, the chiefly center, above the level of producer communities; the former will be a larger, structurally distinct central settlement. In complex chiefdoms, there will be two levels of settlement hierarchy above the level of producers, and "the center of the polity...usually the seat of the paramount, will become both larger than and architecturally differentiated from ordinary chiefly centers" (Wright 1984:43).

2. This is the case for gold working where accounts do not indicate where gold craft specialists/production was located. In regards to iron working there is evidence that, in at least one polity located in Manila, this as well as copper-working was under chiefly control and that production was located in the vicinity of the paramount chief's residence (Anonymous 1570 (1903):102-3). Presumably full-time carpentry specialists, primarily occupied in ship building, were located at the port of Oton on the Visayan island of Panay (Morga 1609b (1904):114), on the nearby islet of Cagayan where all the inhabitants were carpenters (Loarca 1582a (1903):79; Morga 1609b (1904):114), and on the island of Anbil north of Panay (Loarca 1582a (1903):79). There is evidence suggesting that chiefs may have also controlled carpenters via part-time labor required by those that were also "slaves" (Alcina 1668 (1960):41). In regards to textile production, one account mentions that weaving by female "slaves" took place within the chief's residence (Alcina 1668 (1960):40).

3. Gold mines and skilled native goldsmiths are mentioned for various areas in the Philippines (e.g., Pigafetta 1521 (1975):72, 78; Alvarado 1548 (1903):72; Mirandaola 1565 (1903):223-4; Anonymous 1566 (1903):22-31; Legazpi 1569 (1903):81; Lavezaris 1574b (1903):273; Mirandaola 1574 (1903):223-4; Riquel *et al.* 1574 (1903):243; Maldonado 1575 (1903):297; Anonymous 1586 (1906):386; Morga 1609a (1979):285; Morga 1609b (1904):102, 106; Boxer Ms. n.d. (1975):197, 230).

4. Although the evidence is very limited for the 16th and early 17th centuries, goldsmith specialists, probably part-time, did exist and may have been under chiefly sponsorship to some extent given the restricted access to gold jewelry as well as the high skill these craftsmen evinced as remarked upon by a number of the Spanish chroniclers. The question of the organization of gold working and specialists remains however unanswered. (See note 2 for available information on iron- and other smith specialists). Accounts describing the organization of carpentry specialists are also so far lacking, although the existence of apparently full-time ship builders suggests support by chiefly elite (Loarca 1582a (1903):79; Morga 1609b (1904):114). This is further supported by statements that chiefs were the predominant sponsors of maritime trading and raiding expeditions. This would obviously have required boats. In addition, chiefly

support of skilled carpenters is suggested by the high degree of workmanship required for their elaborate and finely constructed residences mentioned in the accounts. There is some evidence suggesting that chiefs may have also controlled carpenters via part-time labor required by those who were also "slaves" (Alcina 1668 (1960):41). There is some information on the organization of textile production and weavers, which suggests some level of chiefly/elite control in the form of female laborers ("slaves") who were required, for varying lengths of time, to spin and weave for the elite (Loarca 1582a (1903):145).

5. Gold, although in what form is unclear, was used in foreign trade (Legazpi 1567-8 (1903):238; Alvarado 1548 (1903):72; Sande 1577 (1903):99-100; Legazpi 1569 (1903):57; cf. Bobadilla 1640 (1905):297), as well as in intra-archipelago exchanges. Iron implements are mentioned as an item of exchange between coastal chiefly polities and upland groups (Scott 1982:182-4) which suggests possible chiefly control or patronage of iron workers and iron objects. Cotton, cotton textiles, and other textiles were also items used in interpolity exchange and foreign trade (Lavezaris *et al.* 1574 (1903):270; Dasmariñas *et al.* 1591 (1903):82), which suggests that some of this production (i.e., for non-domestic use) may have been under chiefly control.

6. Other accounts (see footnote 4) also mention gold, although in what form is unclear, used in foreign trade, as well as in intra-archipelago exchanges. The use of gold in foreign trade suggests that gold mining and gold craft specialists may have been under chiefly control to some extent since they controlled foreign trade activities. However, Legazpi (1569 (1903):56-7) states that mining of and trading in gold (in non-ornamental forms) was not restricted to the chiefs.

7. In the initial years of Spanish rule, tribute was paid to them in spun cotton which may reflect a pre-Spanish item of tribute to chiefs (Morga 1609b (1904):159). (See also note 8.)

8. Some exchanges were between sociopolitically less complex societies and coastal chiefly polities in which crops, such as rice and cotton, and forest products, including honey and wax, were exchanged for coastal/marine products such as fish and salt, and essential manufactured goods, such as pottery (Artieda 1573 (1903):202; Sande 1576 (1903):68-69; Loarca 1582a (1903):61, 121 noted this occurred specifically in the Visayas). The coastal Magindanao polity in Mindanao, for example, imported rice from upriver chiefly polities (Ileto 1971 and Beckett 1982 cited in Junker 1990:318).

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