THE RÍO CLARO SITE (AD 1000-1530), NORTHEAST HONDURAS: A CERAMIC CLASSIFICATION AND EXAMINATION OF EXTERNAL CONNECTIONS

A Thesis Submitted to the Committee on Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Master of Arts in the Faculty of Arts and Science

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ABSTRACT

The Río Claro Site (AD 1000-1530), Northeast Honduras:
A Ceramic Classification and Examination of External Connections

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Excavated in 1975, Río Claro is the largest known Period VI (A.D. 1000-1530) site in Northeast Honduras. The first objective of this study was to compile and present complete typological and modal classifications for the Río Claro ceramic collection. Definitions of the Isthmo-Colombian Area generally include Northeast Honduras as the northernmost frontier, with little actual research to support this assertion. The second objective of this study was to use these new ceramic data, along with other cultural features such as language, settlement planning, mortuary customs, subsistence, and carved stone traditions, to assess whether or not Northeast Honduras was the northernmost frontier of the Isthmo-Colombian Area in Period VI, or if evidence suggests, instead, that it was an autonomous socio-political region. “Frontier” and “independent region” models were examined as potential explanatory frameworks for understanding potential affiliations. Evidence suggests that Northeast Honduras was the northernmost frontier of the Isthmo-Colombian Area in Period VI.

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This thesis is dedicated to my late parents, Frank and Violet Dennett, the source of everything that is good in me. They would be proud, and I miss them both greatly. I also dedicate this to my “niece”, Rebecca Lynd Van Gennip. I hope I can help demonstrate that the world is open to you; all you have to do is reach for it.

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CHAPTER 1
INTRODUCTION AND OVERVIEW OF NORTHEAST HONDURAS

Introduction

The archaeology of northeast Honduras is some of the least investigated and least understood for all of Precolumbian Lower Central America. This archaeological region remains largely unknown due to a paucity of fieldwork. We have only a modest understanding of the linguistic and ethnic make-up of the region at the time of European incursions in the early 16th century, and archaeologists have only recently begun to spatially and temporally define the region based on its unique artifact assemblages and their distribution. Further, there is nothing beyond preliminary ceramic classifications established for the region (Healy 1993). It is apparent that a significant amount of research remains to be conducted before the prehistory of northeast Honduras can be written. However, this does not mean that some of the more basic questions of culture history cannot be addressed based on our current knowledge of the region.

Hoopes and Fonseca (2003) have recently proposed a redefinition of the Intermediate Area, alternatively forwarding the concept of an "Isthmo-Colombian Area" that stretches from northern Central America to northern South America. This redefinition is based on common linguistic traits (Chibchan-speaking groups), genetic traits, evidence for long-term continuous occupation in many regions, and shared material culture traditions. Northeast Honduras has traditionally been accepted as the southern frontier of Mesoamerica (Healy 1984a, 1984b), during early periods (1200-300 B.C.), and the northern frontier of the Isthmo-Colombian Area in later periods (A.D. 300-1530) (Hoopes 2005).

I have chosen not to look at Mesoamerican connections because, after much

evaluation, there is not enough evidence to support cross-cultural comparisons for later time horizons. Earlier research has examined potential connections between northeast Honduras and Mesoamerica, and although definitive connections, especially ceramic forms and associated decorative styles, exist for earlier periods (i.e., the Cuyamel Period, 1200-300 B.C.), there is little strong evidence for Mesoamerican ties in the region after A.D. 300 (Healy 1984a). I am interested, instead, in examining the relationship between northeast Honduras and its more southerly neighbours for which there exists more abundant comparative data in later prehistory.

Herein I examine aspects of northeast Honduras archaeology at various, nested scales of analysis including the site, region, and broader "culture area" (Willey and Phillips 1958:18-21). The present study seeks to accomplish two distinct objectives. The first is to compile and present complete ceramic typological and modal classifications for the Period VI Río Claro ceramic collection, which is currently housed at Trent University. This basic classificatory and descriptive data can then be used to contextualize and explore cultural affiliations both within northeast Honduras and between other, external subareas of the Isthmo-Colombian Area.

Ceramics provide a means of examining geographical boundaries, intra- and inter-regional interaction, and cultural affiliations. As such, the second objective of this study is to use the modal analysis results, along with other cultural features, such as language, architecture and settlement planning, mortuary customs, subsistence patterns, and carved stone traditions, to investigate the relationship between northeast Honduras and the Isthmo-Colombian Area. The specific research question I am addressing is: Was Precolumbian northeast Honduras the northernmost frontier of the Isthmo-Colombian

Area in Period VI, or does the archaeological record suggest, instead, that it was an autonomous socio-political region? “Frontier” and “Independent Region” models are examined as potential explanatory frameworks for understanding relationships and/or affiliations which may have existed between northeast Honduras and its southern neighbours. A recent contribution by Cuddy (2007) argues that northeast Honduras was a socio-politically autonomous region in Period VI. I critique Cuddy’s “Independent Region” model and compare it to the “Frontier” model I have constructed, evaluating which is best supported by the available evidence. Summary examination of the evidence suggests that it is appropriate to classify northeast Honduras as the northernmost frontier of the Isthmo-Colombian Area in the final Precolumbian era.

The Geographical and Environmental Setting

Honduras is one of the largest countries in Central America, with the breadth of its landmass covering approximately 112,000 km². It is bounded by the Caribbean Sea to the north, Nicaragua to the southeast, Guatemala to the west, and El Salvador and the Pacific Ocean to the southwest (Figure 1.1). Apart from the main landmass, the Bay Islands (*Islas de la Bahía*) are also part of Honduras. This group is composed of many islands, the principal ones being Utila, Roatán, and Guanaja (Bonacca) running from west to east off the north coast (Dennett 2005:3; United States Library of Congress 2005).

The highly variable topography of Honduras is similar to that of the rest of Lower Central America and the relief of the landscape is quite pronounced. The central portion of the country is covered by peaked mountain ranges and interspersed valleys that are part of what is more commonly called the “Central American Nucleus”. Mountain chains

Figure 1. 1. Map showing the location of Honduras, Central America.

(*cordilleras*) fan out into two distinct ranges, one running parallel to the Caribbean coast, and the other along the Pacific littoral (Stone 1941:3; Stuart 1964:357; West and Augelli 1966:33). These mountain ranges descend into low foothills (piedmont), valleys, and plains (Stone 1941:3). A tropical strip of land, which begins quite thinly where Guatemala and Honduras meet, becomes an increasingly broad coastal plain as it moves eastward towards Nicaragua, and is a defining geographical feature of the Northeast region.

All of the rivers that drain the Honduran interior are on a low gradient with wide, deep mouths and tend to have high alluvial flood plains towards their lower reaches (Tamayo and West 1964:88, 96). In northeast Honduras there are four main river valleys that drain into the Caribbean (Figure 1.2). The Río Coco (also known as the Wanks, Huanqui, Bodega, Segovia, Yare, or Cabo Gracias a Dios) drains the Nicaraguan northern

highlands and is the most easterly of the northern rivers. This river also serves as the international border between Honduras and Nicaragua (Helms 1978:121; Tamayo and West 1964:97). The Guayape River begins deep inside the Department of Olancho and becomes the Patuca River as it reaches the northeast coast, draining the entire Olancho region. The Río Sico serves to drain the highlands of Agalta and merges with the much smaller Río Paulaya to form the Río Negro (also known as the Río Tinto or the Black River) before it empties into the Caribbean Sea. The Río Negro and its tributaries were some of the most frequently used outlets for traveling inland during the Conquest period (Stone 1941:3). Finally, the Río Aguán (or Roman River) drains much of the highlands in the Department of Yoro, at one point from an elevation of 4,000 m asl on Mount Pijol, and is the westernmost river in northeast Honduras.

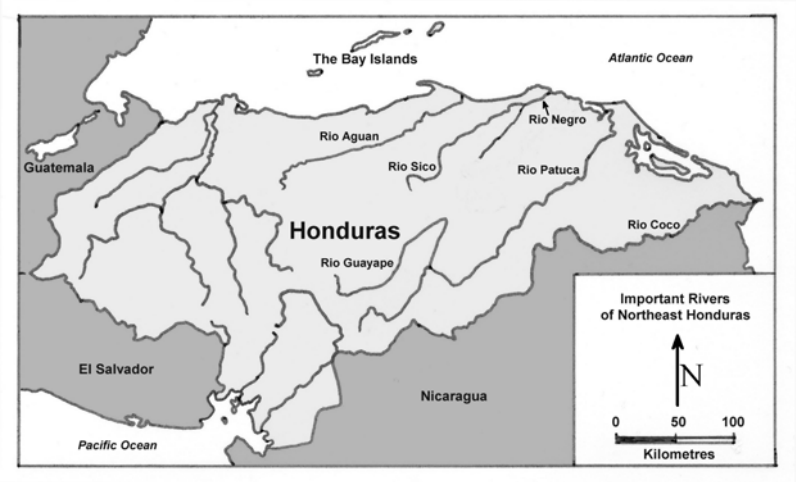


Figure 1. 2. Important major rivers of northeast Honduras.

Like the physical topography, the climate of northeast Honduras is quite complex in nature. There is no “standard” weather pattern that prevails through all seasons (Vivo Escoto 1964:197). Much of the northern coast of Honduras is bathed by warm “trade winds” from the Caribbean Sea creating a mainly stable, tropical climate at elevations

below 800 m asl. The broad coast is called *tierra caliente*, meaning "hot land". Moving inland, and with increasing elevations in the landmass, the climate becomes drier, especially in the winter months, and undergoes more severe hot and cold extremes than does the coast (Stone 1941:3; Vivo Escoto 1964:210; West and Augelli 1966:36). These elevations between 800 and 2000 m asl are known as *tierra templada*, or "temperate land". Most of the modern population and agricultural centres are situated in these two areas. From October to May, cool winds from North America can move southward producing storm fronts called "northers" (or *nortes*). These northers create heavy rainfalls along the north coast of Honduras, causing strong winds and hazardous waters (West and Augelli 1966:37).

As a result of the complex physical topography and climate of Honduras, vegetation (flora) is also highly variable throughout the country. Much of northeast Honduras is a tropical region below 1200 m asl with typical lowland tropical rainforest composed of tropical deciduous and semi-deciduous growth, including canopied broadleaf evergreen and deciduous trees. Ecological zones exhibiting single flora species are typically swampy areas, such as those found along the northeast coast of Honduras (Wagner 1964:229; West 1964:375; West and Augelli 1966:45). There are literally hundreds of different species of trees (such as the ceiba, mahogany, palm, fig, cashew, rubber), woody plants like shrubs and lianas (vines), as well as ground herbs, grasses, ferns, orchids, lichens, moss, and many other epiphytes (Wagner 1964:229-230; West 1964:376; West and Augelli 1966:45). These tropical forests tend to grow on weathered soils of abundant clay and/or alluvium that are continuously leached and quite acidic (Stevens 1964:309; Wagner 1964:258; West 1964:376).

Swamp formations are another distinct, yet spatially restricted, type of vegetation of this region. Mangrove woodland, or tidal swamp, occurs in various portions of the north coast of Honduras in both coastal lagoon areas and up the lower reaches of many large rivers. Savannas are yet another type of ecological environment encountered in northeast Honduras, and are located in areas with extremely sandy soils. Savanna lands tend to grow "islands" of shrubs and palmetto trees, but because these zones are seasonally inundated they do not support pine vegetation. Over time, the effects of human activity (i.e., annual burning, animal pasturing, clear cutting) on the distribution and make-up of various species of flora, as well as the impacts of soils, have been considerable. In fact, it is possible that much of today's savanna land was once tropical or seasonal forest. Although modern humans are, by far, having the greatest impact on the environment today, it must be recognized that humans actively altered their environments in the past as well (Hoopes 1996; Wagner 1964).

Dry evergreen forests (made up of pine, oak, saw palmetto, sandpaper tree, and nance) of the Mosquito Coast (from the Río Negro in Honduras to Pearl Lagoon in eastern Nicaragua) grow in very porous sandy soils with quartz gravel and high silica content in the mountainous (*montane*) uplands at elevations between 1000 and 2000 m asl. These forest swaths also have grass cover, shrubs, and herbs. Where rivers traverse the pine forests, stands of tropical forest trees form galleries along the banks (Parsons 1955:36, 47; Stevens 1964:310; Wagner 1964:259; West 1964:377).

The indigenous fauna of Honduras are as varied as the environmental setting in which they exist. The majority are of Neotropical origin and occupy open woodland and savanna areas. Mammals which reside in the rainforest are primarily arboreal, and

include monkeys, sloth, opossums, coati, and squirrels. Common terrestrial mammals include deer, peccary, rodents, rabbits, and tropical cats. The list of mammals in Honduras is extensive (see Table 1.1). In modern times, deer, tapir, agouti, monkey, rabbit, and peccary are valued by indigenous groups for subsistence (West 1964:382).

Until recently, archaeologists were forced to assume that all types of fauna, including amphibians, birds, fishes, reptiles and shellfish (see Table 1.2.) played an important role in the Precolumbian diet of northeast Honduras, as faunal assemblages were rarely reported (Henderson and Joyce 2004:225). However, excavations by Healy (1978a) at the Selin Farm Site, near the modern town of Trujillo in northeast Honduras, revealed faunal evidence unequalled by previous excavations in the region. Healy's (1983) analysis of Selin Farm Site faunal remains not only served to verify formerly assumed subsistence information, but also to identify a significant number of previously unrecorded species. This research indicated that freshwater fish included catfish, freshwater *mojarra*, and houndfish. Marine fish were primarily represented in the analysis by tarpon, barracuda, snook, grouper, and marine *mojarra* (Healy 1983:43). The most well represented mammals in the assemblage were deer, armadillo, peccary, manatee, tapir, paca, agouti, howler monkey, otter, porcupine, and jaguar. Herons and curassows were the predominant birds identified. Shell middens represented numerous varieties of both bivalves and gastropods. Finally, of the reptiles, iguanas and crocodiles were the most frequently encountered (Healy 1983: 44).

The Selin Farm Site faunal assemblage is the most valuable collection of Precolumbian Northeast Honduran faunal remains available today. It is apparent that the types of fauna recovered are affected by their environmental surroundings; thus

Mammalia	Opossums (*Marsupialia*)
	- Mouse (*Marmosa*)
	- Philander (*Philander*)
	- Woolly (*Caluromys*)
	- Water (*Metachirus*)
	
	Pelagic mammals
	- West Indian seal (*Monachus*)
	- Fin-backed whale (*Balaenopteridae*)
	- Porpoises and Dolphins (*Delphinidae*)
	
	Primates (*Primates*)
	- Monkeys (*Cebidae*)
	  - Howler (*Alouatta*)
	  - Spider (*Ateles*)
	  - Capuchin (*Cebus*)
	
	Rodents (*Rodentia*)
	a) Sciuromorpha
	- Tree squirrel (*Sciurus*)
	- Flying squirrel (*Glaucomys volans*)
	- Pocket gopher (*Macrogeomys*)
	b) Myomorpha
	- Spiny pocket mouse (*Heteromys*)
	- Brown mouse (*Scotinomys*)
	- Water mouse (*Rheomys*)
	- Cotton rat (*Sigmodon*)
	- Rice rat (*Oryzomys*)
	- Wood rat (*Neotoma*)
	- Vesper rat (*Nyctomys*)
	- Climbing rat (*Tylomys*)
	c) Hystricomorpha
	- Porcupines (*Erethizontidae*)
	- Agouti (*Dasyproctidae punctata*)
	- Paca (*Agouti paca*)
	
	Siren (*Sirenia*)
	- Manatee (*Trichechus*)

Bats (*Chiroptera*)
- Leaf-nosed (*Phyllostomidae*)
- Funnel-eared (*Natalidae*)
 	
Carnivores (*Carnivora*)
- Gray fox (*Urocyon*)
- Coyote (*Canis*)
- Raccoon (*Procyon*)
- Kinkajou (*Potos*)
- Coati (*Nasua*)
- Skunk (*Mephitis* and *Spilogale*)
- Cats (*Felidae*)
  - Ocelot
  - Jaguar (*Felis onca*)
  - Jaguarundi
  - Margay
- Tapir (*Tapirus*)
- Collared peccary (*Tayassu tajacu*)
- White-lipped peccary (*Tayassu pecari*)
- White-tailed deer (*Odocoileus virginianus*)
- Brocket deer (*Mazama americana*)
 	
Edentates (*Edentata*)
a) Armadillo (*Dasypodidae*)
  - Common (*Dasypus*)
b) Anteater (*Myrmecophagidae*)
c) Sloth (*Bradypodidae*)
 	
Insectivores (*Insectivora*)
- Small-eared shrew (*Cryptotis*)
 	
Lagomorphs (*Lagomorpha*)
- Cottontail rabbit (*Sylvilagus*)	

Table 1. 1. Indigenous mammalia of Honduras (after Dennett 2005: 9).

1) Amphibia

Frogs and Toads (*Anura*)

- Tree frog (*Hylidae*)
- Narrow-mouth frog (*Microhylidae*)
- Marine toad (*Bufo Marinus*)

2) Aves

- Tinamous (*Tinamidae*)
- Curassows and Chachalacas (*Cracidae*)
- Jacana (*Jacanidae*)
- Hummingbirds (*Trochilidae*)
- Tyrant flycatchers (*Tyrannidae*)
- Wood warblers (*Parulidae*)
- Tanagers (*Thraupidae*)
- Finches and Sparrows (*Fringillidae*)
- Herons (*Ardeidae*)
- Ducklike birds (duck, goose, swan) (*Anseriformes*)

3) Osteichthyes

- Carp and Minnow (*Cyprinidae*)
- Characids (*Characidae*)
- Catfish (*Ariidae*)
- Cichlids – tropical (*Cichlidae*)
- Sea Bass (Grouper) – (*Serranidae*)
- Puffer (*Spheroides*)
- Snapper (*Lutjanus* sp.)
- Barracuda (*Sphyraena* sp.)
- Jack (*Caranx hippos*)
- Snook (*Centropomus* sp.)
- Tarpon (*Megalops atlanticus*)
- Shark (*Carcharhinidae*)
- Houndfish (*Tylosaurus* sp.)

4) Reptilla

a) Turtles
   - Snapping (*Chelydridae*)
   - Mud (*Kinosternon*)
   - Green (*Chelonia mydas*)

b) Lizards (*Lacertilia*)

c) Snakes (*Ophidia*)

d) Crocodilians (*Crocodylia*)

5) Shellfish

a) Bivalves
- Arks (*Anadara* sp.)
- Buttercup lucina (*Anodontia alba*)
- Calico scallop (*Argopecten gibbus*)
- Mangrove oyster (*Crassostrea rhizophorae*)
- Cockles (*Trachycardium* sp.)

b) Gastropods
- Striate bubble (*Bulla striata*)
- Queen helmut shell (*Cassis madagascariensis*)
- Measled cowrie (*Cypraea zebra*)
- True tulip shell (*Fasciolaria tulipa*)
- Angulate periwinckle (*Littorina angulifera*)
- W.I. crown conch (*Melongena melongena*)
- Colorful moon snail (*Natica canrena*)
- Caribbean olive (*Oliva scripta*)
- Scotch bonnet (*Phalium granulatum*)
- Pyramid shell (*Pyramidella dolobrata*)
- Queen conch (*Strombus Gigas*)
- Caribbean vase shell (*Vasum muricatum*)
- River snail (*jute*)

Table 1. 2. Amphibians, birds, fishes, reptiles, and shellfish of northeast Honduras (after Dennett, 2005:10).

proportional percentages of remains would be different in different ecological zones. However, it is still impossible to know if predominant species were actually the most abundant, the most favored, the result of differential preservation, or whether they were highly represented based on the effects of the technology (i.e., hook and line versus net fishing techniques) used by the people procuring them (Dennett 2005:11).

The Cultural Setting

Cultural and linguistic analyses of Precolumbian northeast Honduras have been limited. Similar to the general history of archaeological investigations in Lower Central America, the current knowledge and understanding of ethnology and languages in northeast Honduras is spotty, at best. In fact, prior to the 17th century, there are few references or comments about indigenous life in northeast Honduras (Johnson 1963:57). What little we do know about Precolumbian and Contact Period indigenous culture comes from the writings of 16th century conquistadors, chroniclers (missionaries and historians), royal officials, and travelers (Fowler 1985:42). Traditionally, indigenous cultures have been defined based on a combination of their spoken language and geographical and historic area of occupation.

The first known record of contact between the Spanish and indigenous groups of Central America was chronicled by both Columbus and his brother, Bartholomew. A chance encounter on Columbus' final voyage in 1502 resulted in the discovery of a native trade canoe off the Bay Islands. The native canoe "captain" informed Columbus and his translators that a group called the "Maia" resided to the west and that another group, recorded as the "Taia", resided to the east. It is believed that these indigenous traders

were referring to Maya groups west of the Ulua River (in the Yucatan Peninsula) and Pech (Paya) groups of mainland northeast Honduras to the east of the Aguán River (Johnson 1963:143; Lothrop 1927:351; Stone 1941:9). In 1525, Cortes established the first capital city of Honduras at Trujillo, and chronicled several encounters with local indigenous groups (Healy 1978b:27).

Modern investigators, especially linguists, have used these types of early records to piece together a picture of the various ethnic and linguistic groups in Precolumbian Central America. Archaeologists, beginning in the early 20th century, also played a role in gathering evidence to support, or refute, arguments for linguistic affiliation through analysis of material culture. The result has been a shifting, blurring, and continuous recalibration of linguistic and ethnic boundaries throughout the past century.

At the time of Spanish contact, the population of Honduras was divided among numerous tribes and linguistic groups. It is generally accepted that the main linguistic groups inhabiting what is today Honduras were the Maya (Chontal and Chorti), Lenca, Jicaque (also known as Xicaque or Tolupan), Ulva, Xinca, Mangue, Nahua speakers (including Pipil), Tawahka (Sumu), and the Pech (Paya) (Begley 1999:31; Fowler 1985:38; Healy 1984a:113-116; Hoopes and Fonseca 2003:55; Johnson 1940:90, 1963:59-60; Kidder 1940:443; Lothrop 1939:43; Mason 1940:59; Stone 1941:9; Strong 1935:16). For the sake of clarification I note that the term “Pech” refers to cultural groups and the term “Paya” refers to the language these groups speak/spoke. The Pech are known to have inhabited the northeast portion of Honduras and have been described as Paya in official records dating back as far as 1622 (Stone 1941:9). They have traditionally been viewed as the sole linguistic group inhabiting the region in

Precolumbian times. However, Jicaque, Lenca, Nahua, and Twahka/Tawahka (Sumu) speaking groups may have resided in the peripheral portions of this region at various times as well (Conzemius 1932:14; Healy 1978b; Herlihy 1999:223-224; Johnson 1963: 59-60; Stone 1941:8-9).

Although there is a general consensus with regard to the names and number of language groups in Precolumbian Honduras, broader linguistic affiliations have been a matter of debate for over a century. Early 20th century discussions resulted in various contrasting affiliations being forwarded for Paya-speaking groups, for example. Among these were suggestions that the Paya language was affiliated with Mesoamerican Macro-Penutian proto-types (Sapir, cited in Stone 1941:12), South American Macro-Chibchan proto-types (Kidder 1940:444-445; Lehmann, cited in Stone 1941:12), or even that Paya should be considered an unaffiliated language that had developed *in situ* and in isolation (see Johnson 1940:89-90; Mason 1940:59). Currently, Paya-speaking groups are thought to represent the most northerly linguistic manifestation of the broader Chibchan language family (Constenla 1995; Holt 2000:44).

The modern Pech of northeast Honduras are understood to be direct descendents of Precolumbian groups in the region and have remained, for the most part, physically and culturally isolated from the rest of Honduras (Begley 1999:31-32; Herlihy 1999:222). Begley (2000:42) refers to this intentional isolation since the time of the earliest Spanish incursions as a "policy of withdrawal". However, expanding modern, national infrastructure (mainly in the form of roads), as well as the historical expansion of "Miskito territory" and growing Garifuna populations in northeast Honduras have served to fragment Pech lands and draw many indigenous Pech into mainstream (*mestizo*)

Honduran society.

In the 1980s, efforts to gain official recognition of Pech cultural traditions, and to establish methods for the maintenance of Pech language and identity, led to the establishment of the Federation of Indigenous Pech Tribes (FETRIPH). This modern political movement resulted in nine Pech villages receiving federal provisional land guarantees in 1991. Some smaller modern Pech villages (which had an estimated collective population of only 250 in 1980) are contained within the Río Platano Biosphere Reserve (Begley 2000:43; Herlihy 1999:222-224, 231, 235). The latest National Census for Honduras, in 2001, calculated the total number of Pech residing in the country at 3,141 persons. This is a dramatic increase from earlier censuses which reported 2,079 Pech individuals in 1994, and 798 Pech individuals in 1988 (Vargas Aguilar 2006:13). In 1994, the majority of Pech people were located in El Carbón and Nueva Subirana, both in the Department of Olancho, and in Las Marías, in the Department of Gracias a Dios (Vargas Aguilar 2006:16).

Definition of the Northeast Honduras Region

Based on current knowledge of Precolumbian ethnology, linguistics, and material culture, the northeast Honduras region is defined as the geographical zone comprising the Department of the Bay Islands in their entirety, the Department of Colon, the Department of Olancho, and the western portion of the Department of Gracias a Dios, eastward as far as the Río Patuca (Figure 1.3 and Figure 1.4) (Stone 1941; Holt 2000:44). Future research may extend the region into the easternmost portions of the Departments of Atlantida and Yoro, as well as eastward throughout the Department of Gracias a Dios (perhaps into

Nicaragua). As will be demonstrated, archaeological material culture from this region is unique and relatively uniform throughout; and it is this unique uniformity that serves as the foundation for the current definition of the northeast Honduras region.

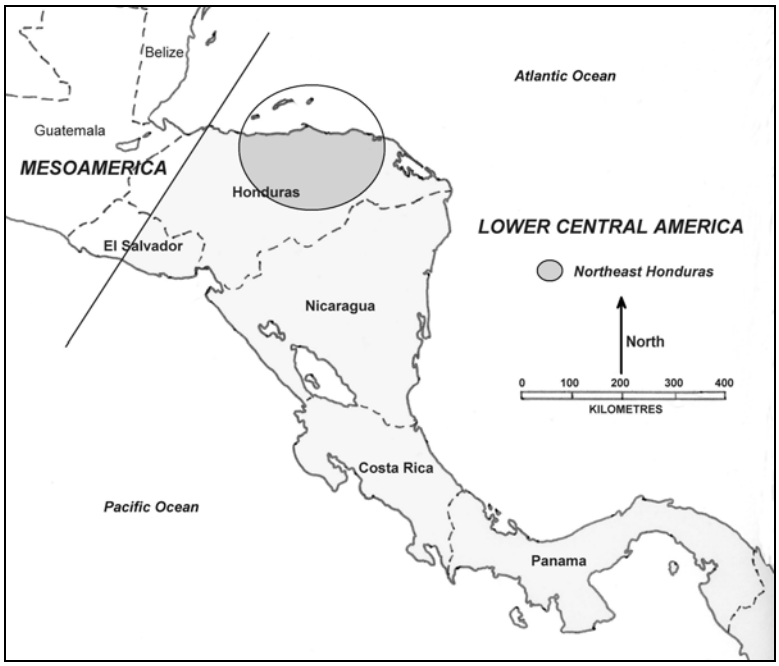


Figure 1. 3. The northeast Honduras region.

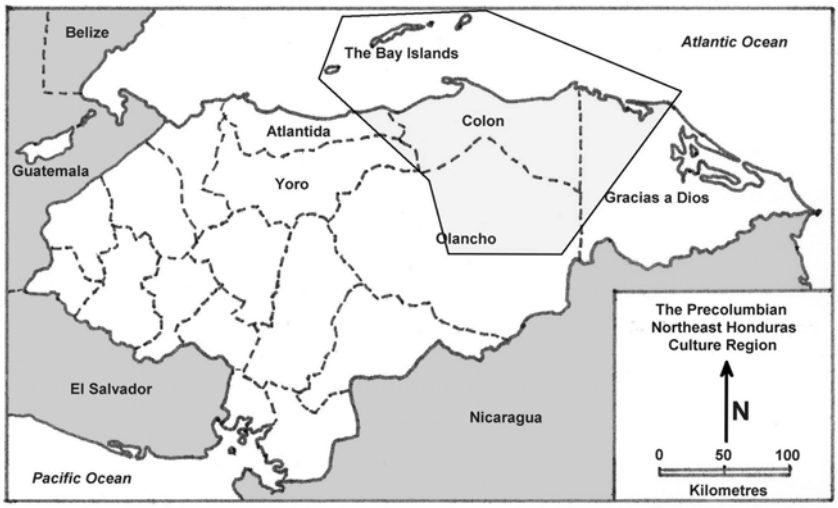


Figure 1. 4. Detailed view of the northeast Honduras region.

At this point it is important to note potential problems with drawing associations between artifacts and people, despite the fact that a one-to-one connection often seems inherently "natural". Pottery is often employed as the primary means of identifying ethnicity in the archaeological record and this connection is grounded in assumptions that are often glossed over and/or accepted as truisms (Jones 1997:108; Silverman and Proulx 2002:13). It is not so much the theoretical concept of ethnicity that needs to be considered but, rather, the idea of "ethnic groups" and how we, as archaeologists, conceive of, identify, and define ethnic groups based on material culture.

By definition, "ethnic groups are culturally ascribed identity groups, which are based on the expression of a real or assumed shared culture and common descent (usually through the objectification of material, linguistic, religious, historical and/or physical characteristics)" (Jones 1997: 84). However appealing the assumption of a "natural" connection may seem, interpretive prudence must be acknowledged, and caution taken, when attempting to relate material culture to either language or ethnic groups, especially recent ones (Cooke 2005:150; Jones 1997:106-109; Strong 1963:117; Topic, personal communication, 2005). The logic behind this statement lies in the fact that recent or historic (including Contact Period) geographical distributions of language and/or ethnic groups may not (and in most cases, do not) accurately reflect their distributions in Precolumbian times. Alternatively, what appears to be a distinct collection of material culture (seemingly attributable to a single ethnic group) may actually reflect the record of multi-lingual and/or multi-ethnic societies, or even a collection of multiple, co-existing ethnic/language groups (Silverman and Proulx 2002:13). It is extremely important to recognize that variation in life ways and the material culture produced throughout these

lifeways are not necessarily reflective of variation in ethnic identity (Shennan 1994:5-7). In order to mitigate the problems associated with a spurious one to one correlation between pots and people, as well as the difficulties associated with identifying ethnias in the distant archaeological past, I examine multiple lines of evidence (i.e., material culture, language, ethnohistory, etc.) to obtain a fuller and presumably more accurate picture of normative structure and, thus, a basis for examining affiliation (as opposed to ethnic identity) in northeast Honduras and between northeast and its neighbours. As such, although it is currently accepted that the ancestors of the modern Pech are responsible for the Precolumbian archaeological record in northeast Honduras, we must remain open to the possibility that there may have been other ethnic and/or language groups involved.

Stone (1941) was the first proponent of the idea that Precolumbian northeast Honduras (and its accompanying material culture) was solely Pech (Paya) territory. She argued, based on the earlier, 19th century writings of E.G. Squier, that reference to other groups in the region (i.e., Toacas or Towaka of the Río Patuca vicinity) were probably sub-tribes of the Paya (Stone 1941:9). Conzemius (1932:14), on the other hand, found that the Tawahka (the most north-westerly sub-tribe of all Sumu speakers) had resided in northeast Honduras since at least proto-historic times. He suggests that the Tawahka (also known as the Twahka) lived along the Patuca River basin, its major tributary the Wampu (Guampu) River, and eastward into Nicaragua as far as the Wawa River.

As we move into recent times it becomes more difficult to trace linguistic groups backward through time and across geographical space. Following the initial subjugation of local indigenous groups by the Spaniards in the 16th century (which regularly led to the movement of indigenous peoples), the Miskito began expelling both Tawahka and Pech

groups, through unbalanced inter-tribal warfare, from their homelands beginning in the early 17th century through to the early 20th century. This imbalance was due, in large part, to Miskito groups acquiring firearms from the British (Clark et al. 1985:16; Conzemius 1932:82-83; Herlihy 1999:223).

Herlihy (1992:222-224) has suggested that Precolumbian and Contact Period Pech (Paya) inhabited northeast Honduras from the Aguán River eastward to the Patuca River, and that the Tawahka (Sumu) inhabited the Patuca River Basin. This conclusion is similar to that drawn by Conzemius almost 70 years earlier. However, Holt (2000:44) alternatively states that Precolumbian Pech groups inhabited the entire Caribbean coast of Honduras, from the Aguán River to Cape Gracias a Dios, and inland as far as the upper reaches of the Patuca River. Still other researchers suggest that the Tawahka (Tawka-speaking) groups were actually part of the broader Pech-speaking peoples, alternatively described as "Meridional Chibchan" (Hoopes 2005:13).

As such, it remains uncertain whether or not Precolumbian material culture of northeast Honduras has resulted from the activities of a single language group or multi-linguistic (and multi-ethnic?) co-existing communities. Regardless, there is little doubt that the extant material culture of the region is quite uniform and distinctive. Based on previous archaeological work, and my own research undertaken at the Smithsonian Institution (National Museum of Natural History, Department of Anthropology, June 2006), I can report that the material culture in the vicinity of the Patuca River is similar in almost all respects to that of the remainder of the northeast Honduras region.

CHAPTER 2
ARCHAEOLOGICAL INVESTIGATION IN NORTHEAST HONDURAS

This chapter begins with an examination of the history of archaeological investigations in northeast Honduras. This is followed by a discussion of the Precolumbian chronology of the region. The final subsection looks at archaeological investigations conducted at the Aguán River Valley site of Río Claro, the focus of this thesis.

A Brief History of Research in Northeast Honduras

The earliest archaeological investigations in northeast Honduras were conducted by Herbert J. Spinden, when he recorded sites along the coast between La Ceiba, Honduras and Bluefields Lagoon, Nicaragua, for Harvard University in the 1920's (Clark et al. 1985:15; Spinden 1925). The Boekelman Shell Heap Expedition, led by Junius Bird, carried out survey and excavation of the Bay Islands in 1931, for the American Museum of Natural History. However, the first "real" archaeological work was in 1933, done by William Duncan Strong for the Smithsonian Institution. Strong surveyed and excavated sites in the Bay Islands, many of which had been visited by Bird only a few years earlier. Strong's work focused on stratigraphy and attempted to synthesize information from the region (Begley 1999:36; Epstein 1957: Preface xxiv-xxvi; Healy 1975:63, 1978a:58, 1984a:121, 1984b:340; Joyce 1990:21; Stone 1941:16). In 1941, Doris Stone published an important descriptive monograph of the material culture discovered along the north coast of Honduras. This was the first real attempt, following Strong, to identify cultural affiliations of populations in northeast Honduras (Begley 1999:36). Stone's work was the last significant focus on the region for over a decade

(Healy 1978a:58, 1984b:340).

A.V. Kidder II, Gustav Stromsvik, and Gordon Ekholm excavated sites on Utila Island and in the Department of Colon in the 1950s, renewing scholarly interest in this region (Epstein 1957:21). In the mid 1950s, Karl Helbig published a report, in German, of excavations in the same region (Healy 1975:64-65; Helbig 1956). Although he had not actually visited Honduras at the time, Jeremiah Epstein made one of the most important contributions to archaeology of the northeast Honduras region in the late 1950s when he conducted a modal analysis to seriate materials collected earlier by Bird and Kidder II, Stromsvik, and Ekholm (Epstein 1957). The result of his endeavor, produced as a doctoral dissertation, was the first regional chronology. He proposed two successive temporal units spanning approximately A.D. 600-1520. Although Epstein's work would be considered scientifically limited by today's standards, it continues to serve as the basis of the chronology that is currently in use (Healy 1975:65, 1978a:58, 1984b:340).

Following Epstein (1957), there was little published research on northeast Honduras for about 30 years. Paul Healy renewed scholarly interest in the region when he conducted the first systematic investigations from 1973-1975 (Begley 1999:37). His important research was conducted in the vicinity of Trujillo and the Aguán River Valley, and on the Bay Islands (Healy 1974, 1975, 1978a, 1978b; Veliz et al. 1977). Being the first to procure radiocarbon samples for the area, Healy can be credited with the revision and clarification of the regional chronology for northeast Honduras. Post-1950, Healy is also responsible for the promotion of a broader Honduran archaeological synthesis, building on efforts of earlier writers such as Strong and Glass (Healy 1984a; Joyce 1990:21).

Since Healy's revival of archaeological interest in the northeast Honduras region, additional surveys and excavations have been conducted. In the late 1970s, Edward Shook undertook a non-systematic survey of the Río Negro, which resulted in the location and excavation of two Historic Period sites, as well as the identification of over 80 Precolumbian sites in the Departments of Colon and Gracias a Dios (Begley 1999:37; Clark et al. 1985). In 1985, the *Instituto Hondureño de Antropología e Historia* (IHAH) investigated what is likely to be the largest and most complex site known to date in the Northeast region, Las Crucitas. In 1990, on behalf of the IHAH, Vito Veliz identified five sites near the modern town of Dulce Nombre de Culmi, in the Culmi Valley (Begley 1999:37-38). In 1991, Christopher Begley began an important seven-year project (Proyecto Río Platano [PRP]), also sponsored by the IHAH, that identified 125 sites in the Culmi Valley. In 1994, Begley completed excavations at the Difficulty Hill site on Roatán Island. In 1994-1995, the IHAH sponsored a salvage archaeology project at Tocoa, in the Department of Colon. In 1994-1995, James Brady and George Hasemann (Brady et al, 1995) excavated the Talgua Caves near the modern city of Catacamas, Olancho. In 1995-1996, following the Talgua caves discovery, Dixon and colleagues (1998) excavated near the modern village of Talgua, not far from the caves.

The Northeast Honduras Regional Chronology

Until the 1970s, the dating of archaeological sites in Lower Central America was often discussed in terms of Mesoamerican, especially Maya, chronological periodization. As the archaeological database and knowledge of Precolumbian Lower Central American cultures grew it became increasingly difficult to force, essentially, the new data to fit

neatly into an older Maya chronology. However, it was not until 1984 that an independent, local chronological periodization was created in a “think-tank” meeting of specialists at a School of American Research in Santa Fe, New Mexico (Joyce 1990:21; Lange 1992b:5-6; Lange and Stone 1984; Willey 1984). The result was an outline of developmental stages that illustrated a very different chronology between the traditional Maya chronology and new Intermediate Area chronology (Figure 2.1). This periodization scheme (Periods I-VI) was based on archaeologically apparent shifts in socio-cultural and technological complexity.

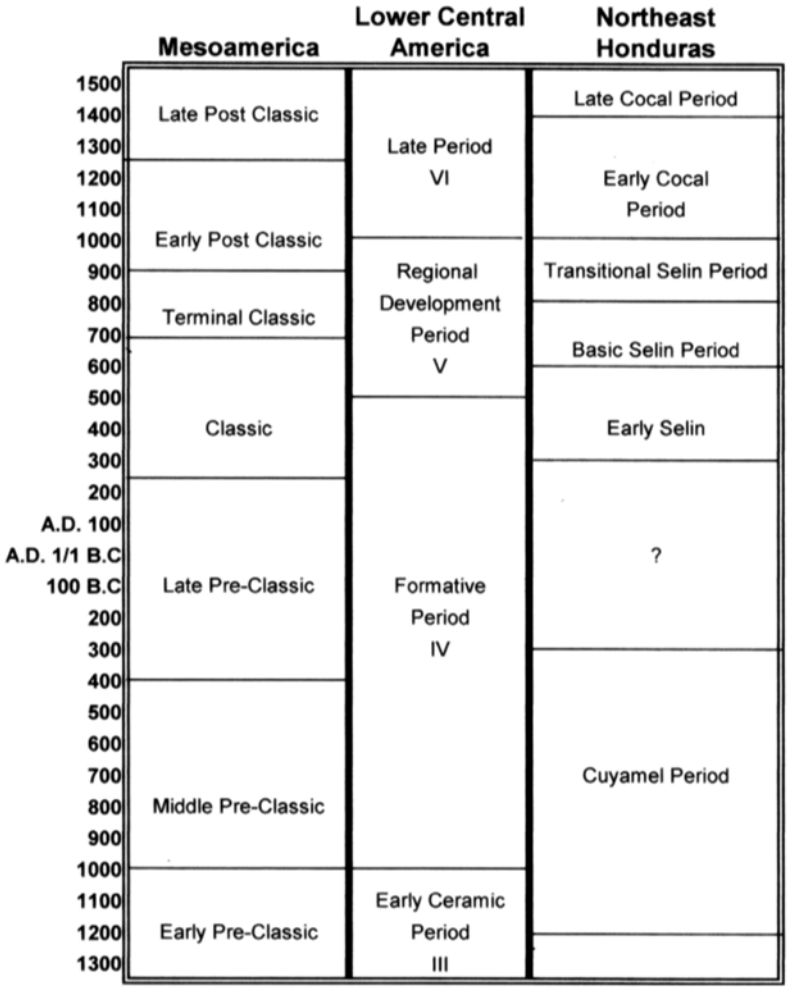


Figure 2. 1. Chronology chart by culture area and region (after Dennett, 2005: 29).

The current cultural chronology for northeast Honduras does not fit precisely into the Intermediate Area chronology, but is a much closer fit than within the Mesoamerican chronology. One explanation for why the northeast Honduras chronology does not fit as closely as might be expected could be due to the fact that it is based solely on shifts in ceramics rather than complete cultural repertoires. As mentioned earlier, Epstein (1957) was responsible for the first chronology of the region which identified two consecutive periods; the Selin Period (A.D. 300-1000) and the Cocal Period (A.D. 1000-1530). In the 1970s, Healy (1978a:61) refined and supplemented this initial chronology based on radiocarbon dates from his archaeological investigations of the region. The addition of a much earlier Cuyamel Period (1200-300 B.C.), based on investigations of the Cuyamel Caves in the Aguán River valley, represented a substantial lengthening of the sequence. However, today, there remains a sizable gap (300 B.C.-A.D. 300) in our knowledge of Precolumbian northeast Honduras that can only be rectified through additional field work.

As it is currently understood, the northeast Honduras regional chronology is comprised of three non-consecutive cultural periods (see Figure 2.1). The earliest is the Cuyamel Period (1200-300 B.C.), followed by a gap of archaeological data between 300 BC-AD 300. The Selin Period is divided into 3 phases: Early, Basic, and Transitional Selin, which run from A.D. 300-1000. The final time span, and the focus in this thesis, is the Cocal Period which is divided into both Early and Late phases and runs from A.D. 1000-1530 (Healy 1993; Healy and Dennett 2006). The arrival of the Spaniards in northeast Honduras after A.D. 1530 launched the beginning of the Historic Period in this region.

Archaeological Research at the Río Claro Site

My thesis research focuses on ceramic materials recovered in 1975 by Healy (1978b) at the site of Río Claro. Located southeast of modern day Trujillo, Río Claro (H-CN-12) lies on a now dry tributary of a river of the same name. This river empties into the much larger Aguán River which, in turn, has headwaters in the Department of Yoro and serves to connect central Honduras to the Caribbean coast to the north (Figure 2.2).

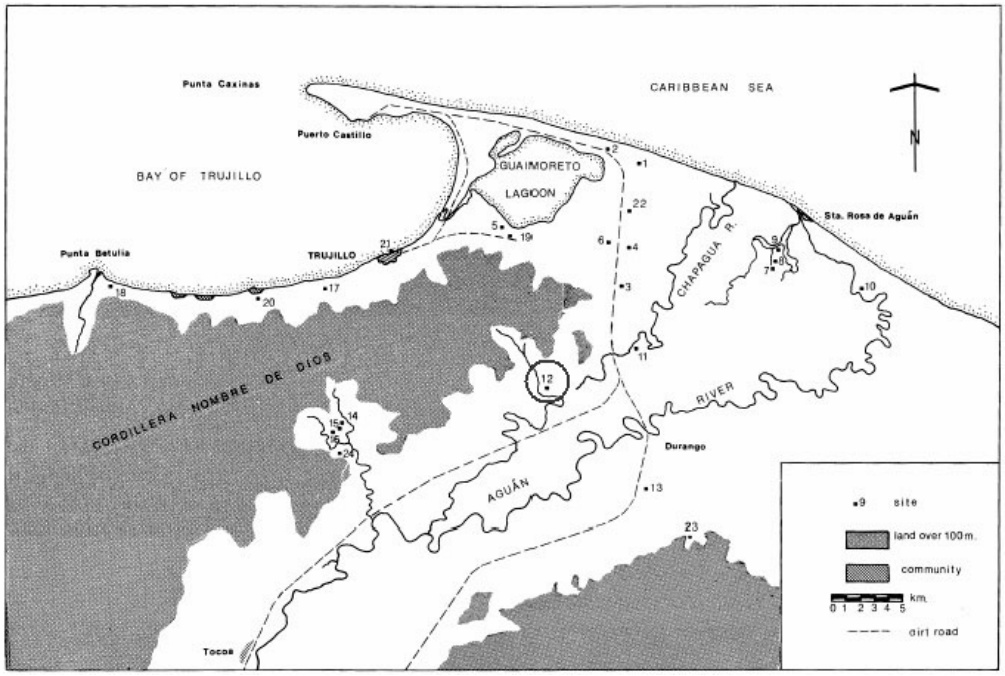


Figure 2. 2. Area surveyed by Healy in 1975. Río Claro is circled (after Healy 1978b:16).

Río Claro is currently the largest known Precolumbian site in the Department of Colon, Honduras, covering approximately 450 x 190 m. It consists of more than 50 truncated earthen constructions in a variety of shapes, including rectangular, square, oval and irregularly-shaped mounds (Figure 2.3). Many of these earthen constructions are cobble faced and approached by stone faced ramps. The majority of mounds are long, low platforms which served as the elevated bases for longhouse-type pole-and-thatch

superstructures. Several of these long, rectangular mounds measure more than 50 m in length and many have a single cobblestone alignment around the perimeter of the raised and flattened surface, which likely mark the foundation line of the original superstructure. As demonstrated in Figure 2.3, constructions within the site perimeter were densely arranged around two distinct open plazas. Mound A, the tallest structure at Río Claro, is ovoid in shape and stands 7 m above the surface of Plaza A, the main open area at the site. This central mound is quite different from most other mounds at the site, both in terms of its shape and height (most other mounds averaged 1.2 m in height). Mound A has two opposing and wide cobble ramps leading to its summit from both the western and eastern faces of the mound (Healy 1978b:17-19).

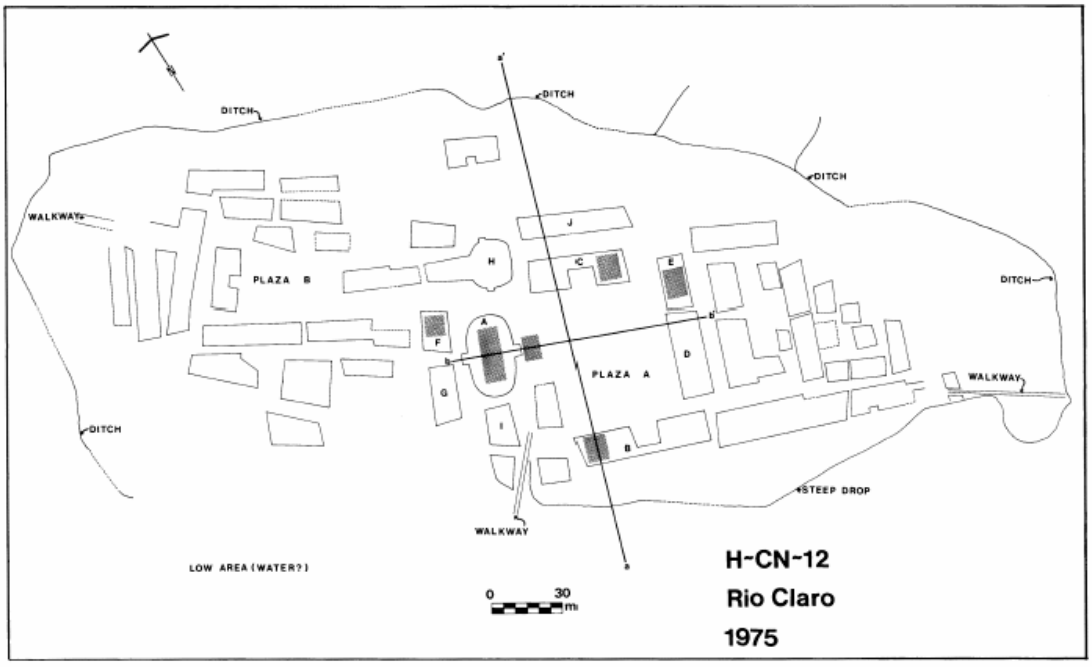


Figure 2.3. Site plan for Río Claro. Excavations indicated by darkened areas (after Healy, 1978b:18).

The site is located atop a natural rise, about 12 m above the valley floor at some points. It is surrounded, in most areas, by what appears to be the remnants of a man-made ditch. The remaining, non-ditched, area surrounding the site appears to have once been part of a permanent body of water, perhaps a pond. Three stone-covered pathways, ranging from 1–4 m in width and up to 42 m in length, lead from the interior, in different directions, and terminate at the outer limits of the site (Healy 1978b:17).

During the 1975 field season a complete surface collection and 10 excavations were conducted. Seven carbon samples were recovered from hearths and/or charcoal lenses contained within various excavation units at the site. Six of the samples were procured from excavations into mounds (A, B, C, E, and F) and the seventh was recovered from the floor of Plaza A (see Figure 2.3; Healy 1978b:21-22). Radiocarbon dates from these samples served to provide a temporal framework for the associated artifacts which were recovered at the site. These radiocarbon dates served to both support, and refine, our understanding of the Period VI archaeological record for northeast Honduras.

Many types of artifacts were recovered during surface survey and excavations at Río Claro. Among the ceramic artifacts were sherds, ocarinas, and a *sello* (roller stamp). Pottery, in the form of sherds, made up the vast majority of artifacts recovered from the site. Lithic artifacts included obsidian bladelets, scrapers, and flakes sourced from the La Esperanza source in western Honduras (Healy et al. 1996:20), as well as basalt, T-shaped chipped stone axes (more likely hoes), ground stone *mano* and *metate* fragments (both basic turtle-back basin types and elaborate tripod types), ground greenstone beads, polished celts, and bark beaters (Healy 1978b:22-25).

The pottery of Río Claro is the focus of this research project and will be discussed in detail in the following chapters. Based on the extensive research I have conducted on ceramics from northeast Honduras, I identify key modal traits and demonstrate that Río Claro is a representative site in terms of Period VI ceramics. The array of decorative styles and associated vessel and appendage forms from the Río Claro collection are extremely similar to all other ceramic collections I have reviewed from the northeast Honduras region. As such, I believe that the Río Claro ceramic collection, coupled with information from other sites of the region, comprises a reasonable type-set of Period VI ceramics for all of northeast Honduras. I will also demonstrate several close parallels between ceramic modes from northeast Honduras and those from other regions of the Isthmo-Colombian Area.

CHAPTER 3
METHODOLOGY

Analysis of the Río Claro ceramics began with cataloguing the entire collection, wherein each sherd was numbered and general information was recorded. This allowed for an "official" documentation of the ceramics, as well as an opportunity for the author to gain more familiarity with each piece. At the conclusion of the ceramic analysis, the catalogue was revisited so that typological and modal information could be documented for each artifact. A single, "all purpose" (universal) data sheet was developed which allowed for the recording of pertinent information for sherds and appendages (see Appendix A).

In excess of 10,000 sherds were collected during both surface collection and excavations at Río Claro. Many of the sherds contained no diagnostic information and were re-interred at the close of the field season. Of the diagnostic ceramics retained, the majority was housed at the local *colegio,* and a small portion was brought back to Trent University for analysis. Constraints on the number of ceramics retained for analysis were not only due to the large size of the principal collection, but also because of the requirements of the contract agreement between Dr. Healy and the IHAH which provided permission for the excavations. The collection selected for return to Canada was designed to be representative of the excavated ceramic sample (Healy, personal communication, 2005). This retained material constitutes the sample (n = 325) used in my thesis research. Analysis was conducted on both single and refitted sherds, representing approximately 3 percent of all ceramics excavated at Río Claro.

Paste Composition Analysis

Although much of the methodology I employ in the current ceramic analysis is adapted from that traditionally used in the Mesoamerican area, I have intentionally refrained from using the term "ware" in describing this aspect of the analysis. Surface treatment, or finish (which is generally combined with paste composition in creating the category "ware"), does not serve the same purpose at the current level of study that it does for ceramic analysis in the Mesoamerican area. Although it may be useful to employ "ware" as the overarching organizational mechanism when constructing a typological classification (types, followed by varieties, etc.) to explore higher order questions of social complexity or interaction, I do not think that this level of analysis is warranted, useful, or even possible for the Río Claro site, or the northeast Honduras region, at this time. If we can garner a broader knowledge of paste types and sources from future archaeological work in the region, "ware" might potentially become a more useful analytical category.

Instead, I have structured the analysis to allow for an independent review of paste composition which has been included in the typological classification. I have moved the aspect of surface treatment into the typological analysis and description itself. Future work in the region, with a larger sample for study, might well lend itself to the establishment of a unique ware category in the taxonomic hierarchy but, for now, it remains beyond the scope of this analysis.

An analysis of paste composition allows for a simple, yet effective, means of observing and recording technological aspects within a ceramic classification. Thirty years ago, Rice (1976:538) and others (see Sabloff and Smith 1973) suggested that paste

has the potential to be an important analytic tool because paste analysis creates comparable objective observational categories. Paste composition is independent of surface treatment and stylistic design techniques and is, in part, environmentally determined (Rice 1976:539). As such, paste production *tends* to be spatially restricted to either a site or a localized region (although this is not always the case).

As noted, the role of paste here will not reach beyond the basic descriptive analysis. However, recording these data allows for the establishment of a sampling base that will be available for future researchers working in the region. It is anticipated that increased archaeological activity and subsequent growth in the archaeological database in northeast Honduras will result in new and more complex research questions which might benefit from this type of analysis (i.e., questions regarding the behaviour of individual potters, trade, or spatial distribution and/or movement of goods). Attributes of paste composition which were studied in this analysis include colour, hardness, temper, texture, and observations on the results of firing (Rice 1976:538; Sabloff and Smith 1973:98).

For the purposes of this thesis, paste types are meant to be viewed as site-specific. Paste colour was determined from the cross-section of a clean break, using a Munsell colour chart. Hardness was determined using Moh's hardness scale. In all cases the scratch test for hardness determination was performed on the primary exposed surface (i.e., on the interior surface of plates and dishes, and the exterior surface of jars). Although hardness measurements were collected, these data ultimately lacked utility in the final analysis and were disregarded because the recorded hardness scores did not realistically correspond with the "actual" hardness of the paste. Identification of inclusions (naturally occurring and/or intentional temper), including size range, shape,

and relative abundance, were conducted using McCollough sand-grain and geotechnical gauges. A thin section analysis was conducted on five sherds, to verify temper identifications. The selection of samples was chosen to be representative of the range of petrofabrics as identified macroscopically. The results of this analysis will be discussed in the next chapter.

Fabric texture was also noted. “Texture” was a more subjective determination meant to describe the “look” of the paste and how it “felt” to the touch (Orton et al. 1993:70). For example, texture descriptions for the paste include terms such as “fine”, “coarse”, “hard”, “gritty”, or “powdery”. I would acknowledge beforehand that a great range of variation in paste texture often occurs within each typological category (see Chapter 4). I argue that this variation can best be explained as the result of differential environmental preservation, unique paste recipes of individual potters, the degree of surface compaction/finishing during vessel production (i.e., a minimally smoothed vessel surface versus a well-burnished or polished vessel surface), the function of the vessel when it was in use (i.e., was it chronically exposed to fire, water, acidic contents, etc?), or any combination of these factors. Observations on the results of the firing process (i.e., oxidization, reduction, fire clouding, etc.) were also noted. All observations were made using a *Leica 2000* microscope to 45x magnification.

Typology (Taxonomic Classification)

The question of which method constitutes the most appropriate way to classify archaeological ceramic materials has been at the core of (often heated) debate among archaeologists for more than half a century. Within Honduran archaeology, the type-

variety system of classification has become the standard method of analysis for the initial description of ceramic data. The basic approach using this classification method is borrowed, in most part, from the type-variety system widely used in Mesoamerican ceramic studies (Beaudry-Corbett, et al. 1993:3-4). Despite criticisms of this method (see Dunnell 1971, for example), it is the most useful for the purposes of this thesis. The reasons for this choice are outlined below.

One of the primary objectives of this thesis research was to identify and describe the ceramic collection from Río Claro. By employing the type-variety classification system I am able to develop a uniform nomenclature which characterizes and describes these ceramics. The type-variety system is an organizational tool, and the main purpose of conducting this analysis was to create a comparable database to aid future researchers in gaining a familiarity with, and means of chronological identification of, Period VI ceramics from northeast Honduras in general, and from the Río Claro vicinity specifically.

One major criticism of the type-variety system is that it is rooted in (what some see as) an antiquated Culture History approach. This system focuses on temporal and spatial specificity which has been traditionally used to aid in the definition of “culture areas” (Sinopoli 1991:52-53). Archaeological practice in other regions, including Mesoamerica, has “evolved” and now applies more complex theory, research questions, and associated methodology to analyze and interpret data. However, I believe that the archaeological record of northeast Honduras can benefit from the application of Culture History methods in order to establish the much needed basic archaeological knowledge of the region (spatial and temporal parameters) that researchers from many other areas often

take for granted.

The book *Pottery of Prehistoric Honduras: Regional Classification and Analysis* (Henderson and Beaudry Corbett 1993) was the first attempt at a standardized collection of ceramic typologies from throughout Honduras. This edited volume also features the first preliminary typology for the ceramics of northeast Honduras (Healy 1993). In his chapter on northeast Honduras, Healy covered ceramics from all known periods. However, his examination of Period VI ceramics from the region was a brief overview which requires greater detail. Begley (1999) built on the types established by Healy to define a preliminary typology for the Culmi Valley, further south, in Olancho. Also covering all periods, Begley outlined his ceramic classification in a similarly brief fashion. The classification undertaken in this analysis is aimed at expanding and clarifying types and varieties of Period VI ceramics, where Río Claro might potentially serve as the type-site for the broader northeast Honduras region.

For the purposes of this analysis, a type is defined as a ceramic unit exhibiting distinct visual and/or tactile characteristics. These characteristics can be observed in form, surface finish, and/or decoration (Beaudry-Corbett et al. 1993:4). Whallon and Brown (1982: xvii) have forwarded a working definition which states that a type is "a group or class of items that (is) internally cohesive and separated from other groups by one or more discontinuities". Alternatively, Spaulding (1982:18-19) states that a type is represented by an identifiable cluster of nonrandom attributes. Although these definitions differ in terms of objects versus attributes, they are not necessarily at odds (Rice 1987:276). Both definitions aim at creating groups comprised of similar artifacts (based on clustering of similar features) which are observably different from other groups.

A ceramic typology represents distinct groupings of vessels (or sherds of vessels) which are constrained, both temporally and spatially, at a specific site or within a particular region (Arnold 1985:1; Beaudry-Corbett, et al. 1993:4; Gifford 1976:9). Types, as I have defined them here, have also been identified by Rouse (1960:320) as “historical types”. Historical types are used for defining local chronological periods and dating sites and their associated cultures. As such, this remains an important goal in northeast Honduras.

A variety is defined as a further breakdown, or reduction, of the broader type classification. Varieties differentiate within a type classification, based on changes or discernable variation in design style or production technology, yet remain within the limitations of the formal type description (Gifford 1976:10; Sabloff and Smith 1969:278-279). They are typically minor stylistic or decorative variations of the type.

The typological classification undertaken in this thesis research was based solely on vessel sherds from the Río Claro collection. However, occurrences of identifiable and comparable types and/or varieties known from other sites in northeast Honduras, and those I have seen in museum collections or publications, are also noted in the type descriptions below to support my classification. Descriptions of associated paste and modes (where identifiable) are also noted. Existing types have been utilized and refined wherever possible. Newly named types and varieties have been constructed using typical North American taxonomic methods outlined by Smith et al. (1960:334).

Initial analysis involved the identification of the vessel portion (i.e., rim, body, attachment, etc.) and, from this, the vessel form associated with each sherd. Determination of vessel form (generally tied to vessel function) was based on a basic

classification scheme typically used in Mesoamerican ceramic analyses (Pendergast 1971:24; Rice 1987:215-217; Sabloff 1975:23-25). In this scheme, five vessel forms are identified: plates (height less than 1/5 of the diameter), dishes (height between 1/5 and 1/3 of the diameter), bowls (neck-less with a height from 1/3 to equal to the maximum diameter), jars (restricted orifice with a height which exceeds its maximum diameter), and vases (neck-less cylindrical vessel with a height that exceeds its maximum diameter). Probable vessel form, along with information on wall/rim orientation, was recorded for each sherd.

Sherd thickness was calculated based on the average thickness of the existing vessel wall (not including discernable rim or lip), and additional measurement and observation varied according to the sherd in question. Rim sherds, which represent the majority of sherds in the Río Claro collection, were identified using Sabloff's (1975:24-25) definitions. Both rim form (i.e., direct, exterior thickened, exterior folded, etc.) and lip type (i.e., rounded, pointed, squared, beveled-in, etc.) were recorded for each rim sherd. As one might expect, not all rim and lip types outlined by Sabloff were encountered in the Río Claro collection. In fact, several variant forms unique to the site (and region) were encountered (see Figures 3.1 and 3.2). This difficulty or lack of perfect fit between the Mesoamerican descriptive scheme and actual vessel (or vessel-portion) forms from northeast Honduras was apparent throughout the analysis. However, the Mesoamerican scheme for classification was retained because it was the most suitable means of standardizing and describing most aspects of the Río Claro sherds. Where certain aspects of form did not conform to Sabloff's classificatory scheme, differences were noted and discussed.

Where possible, orifice diameter was calculated using a diameter template. All measures of diameter were taken from the point of full contact between the interior of the rim sherd (the orifice opening) and the template surface. Rim profiles were drawn (at a scale of 1:1) for several sherds in order to demonstrate variation in rim form and orientation within any given type and/or variety. Base type (i.e., flat, dimpled/incurved, rounded, etc.) was also noted where possible. Decoration type (i.e., motif, incision style, punctate, appliqué, etc.), surface finish (paint, slip, self-slip, smoothed, burnished, etc.), and the appearance of the surface finish (matte, low luster, high luster, etc.) were fully described for each sherd (Rye 1981:89-93).

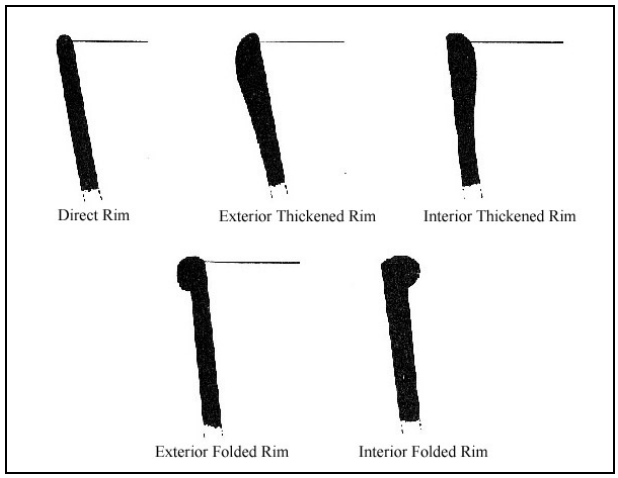


Figure 3.1. Examples of common rim types (after Sabloff 1975:24-25).

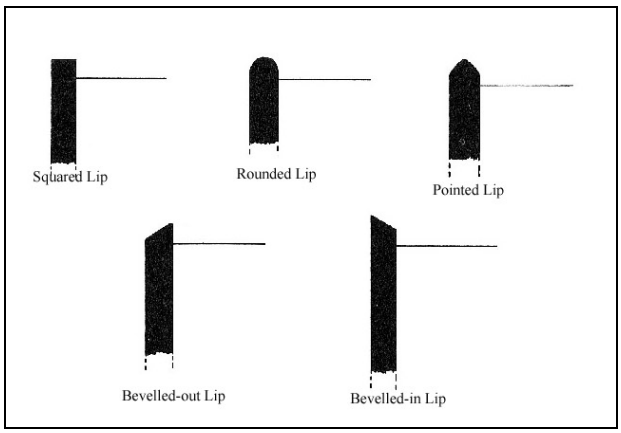


Figure 3.2. Examples of common lip types (after Sabloff 1975:24-25).

Modal Analysis (Analytic Classification)

In the recent past researchers have suggested that (and debated whether) ceramicists must choose between examining either modes or types in an analysis. However, many have argued, and I agree, that both modal and typological classifications can not only co-exist in an analysis but can serve to complement one another (Beaudry-Corbett et al.1993; Culbert and Rands 2007; Gifford 1976; Sabloff and Smith 1976). Modes require an equal amount of attention in an analysis as they have the potential to address different and wider ranging questions. As used in this analysis, a mode is defined as an individual feature or clustering of features which carry a unique significance apart from the typology. In many cases modes will crosscut types and varieties both spatially and temporally and, as such, should be the subject of a unique analysis (Gifford 1976:11). In this study I focus on what Rouse (1960:313-315) has described as "conceptual modes". Conceptual modes are constituted by the style and form of the artifact (or artifact portion) in question, as opposed to its manufacture (Rice 1987:277). Typically, modes are considered to encapsulate special segments of pottery such as rims, appendages, or entire vessel forms (Gifford 1976: 8, 11).

The current modal analysis was based solely on vessel appendages (including supports, handles, and lugs or *adornos*) from the Río Claro collection. The methodology used in this portion of the classification adheres in large part to the use of modal analyses by several prominent Lower Central American researchers (see Corrales 2000; Linares 1968; and Snarskis 1978, for example). At the conclusion of the analysis, linkages between mode, paste, and types and/or varieties are noted, where identifiable.

The modal analysis began with identification of the appendage type (i.e., support,

handle, etc.), form (i.e., conical, tubular, etc.) and whether or not the appendage was hollow or solid. Length and width measurements were taken and appendage decoration (i.e., incision, perforation, appliqué, motif, etc.) was also recorded. Finally, evidence of an application scar where the appendage had been mounted to the vessel, or instances where a remnant portion of the vessel remains attached to the appendage, was noted.

CHAPTER 4
CERAMIC ANALYSIS AND CLASSIFICATION

Attempts at classifying the ceramics of northeast Honduras began with Strong's (1935) largely descriptive monograph detailing his archaeological research in the Bay Islands. Strong provided the first published overview of ceramics from the region, describing and discussing all the pottery he encountered. He created "types" which included "Plain Monochrome", comprising all plain utilitarian wares; "Elaborate Monochrome", which comprised all monochrome painted, slipped, and unpainted vessels with incised, punctate, appliqué, and/or modelled decoration; "Polychrome I", which is currently know as Bay Island polychrome; and "Polychrome II", which comprised all vessels painted with various linear, curvilinear, and/or geometric motifs. Based on associated artifacts of varying types, Strong (1935:145) was able to piece together a rough chronology as follows,

> "As to sequence, there is therefore some stratigraphic evidence that plain monochrome precedes elaborate monochrome ware and Polychrome I. The elaborate monochrome is evidently contemporaneous with Polychrome I. On stylistic grounds Polychrome II appears to be later than Polychrome I, but there are no stratigraphic clues to its age."

In 1957, Epstein's doctoral research synthesized known data from the region and served to broaden the ceramic classification using stratigraphic seriation techniques, while concurrently establishing a firmer chronology for northeast Honduras (see Chapter 2 for chronological details). For the purposes of this thesis, I examine only his Cocal Horizon descriptions as they cover the same time span as the occupation at Río Claro.

Epstein (1957:273) identified an early period associated with “Bay Island Polychrome” (Strong’s Polychrome I) and the “Abstracted Scroll Type of the Incised Punctate Ware”. He suggests that these “types” are highly standardized with minor intra-regional variation (Epstein 1957:274). He further states that the late period of the Cocal Horizon is poorly defined, but is largely represented by “Simple Incised” ceramics, with a minor “Abstracted Scroll” component (Epstein 1957:275).

It was not until the mid 1970s that Epstein’s work received any review or verification. Based on the first radiocarbon dates for the region, Healy (1993) refined and elaborated on the styles and chronology originally identified by Epstein, ultimately constructing the first widely published typological classification for the ceramics of northeast Honduras, with accompanying radiocarbon dates. Little divergence from Epstein’s original identifications occurred with the construction of Period VI types. Only three types were formally named for the entire period; “Bay Island Polychrome”, “Dorina Abstract Incised Punctate” and “Concha Simple Incised Punctate” (Healy 1993:209-213).

In 1999, the latest major contribution to the slowly and sporadically evolving ceramic classification of northeast Honduras was provided by Begley, who created a unique typology for the Culmi Valley. Refining and supplementing previous typologies (as discussed above), Begley (1999:123) chose to group new and existing types under broader paste ware categories. The number of types he attributed to Period VI ceramics in the Culmi Valley expanded to create a refined local typology, including newly defined “Carpá Combed”, “Keská Incised and Punctated”, “Cooperativa Cream Slipped”, and “Fernanda Burnished” types.

Other preliminary typologies do exist for specific sites and subregions of northeast Honduras (see Veliz et al. 1977; Viel and Begley 1992, in Begley 1999:147-151) but will not be discussed here as they were never elaborated or fully formalized and, I feel, only serve to create unnecessary confusion. A more nuanced and detailed examination of the Río Claro collection (n = 325) has resulted in a further refinement and elaboration of the Period VI typology for the site and, our evidence suggests, for much of northeast Honduras.

Paste Composition

All Río Claro ceramics are made of coarse earthenware. The soils and associated clays of the region appear to have an extremely high iron content which, when oxidized, produce (sometimes brilliant) red, orange, and yellowish paste colours. This has led to infrequent confusion in differentiating between a self-slip (where air and/or sun hardened vessels are rubbed with a wet hand or other material, such as cloth or grass, to draw a thin layer of lighter clay particles to the surface before firing) and soil staining as a result of long-term interment. Self-slipping can be identified by visible surface striations, but these are often obliterated by post-excavation cleaning techniques. The paste types discussed below are defined by the relative abundance of particular inclusions. This is a technical classification based on my own macroscopic analysis, which was informed by the results of a thin section analysis conducted by Kay Sunahara of the Royal Ontario Museum (see APPENDIX B). As will be discussed in greater detail below, analyses of paste composition from the ceramic collection at Río Claro suggest that all examples were probably locally produced. In fact, paste analysis suggests that two unique (or perhaps disparate) clay sources were utilized concurrently at the site for the entire occupation

sequence.

Pastes at Río Claro demonstrate a fabric composed of well-sorted, primarily naturally occurring inclusions. Rarely (except in cases with heavily eroded surfaces) are inclusion materials visible at the vessel surface. An overall lack of post-firing fabric voids suggest that the clay was typically well purged of organics and extraneous material before it was used in vessel construction. In several sherds, the sheer abundance of inclusion material (especially “natural”, round river sand) seems to overwhelm the clay matrix. This may indicate that naturally occurring, “suitable” inclusions may have been left in the clay during preparation, or were introduced to the matrix as “at hand” tempering material.

Based on thin section results, the two pastes identified for Cocal Period Northeast Honduras ceramics are:

Type: AMPHIBOLITE PETROFABRIC
Identifying Attributes:
This petrofabric has a diagnostic, high abundance of Amphibolite (most likely hornblende) (10-15 %). Other determinate inclusions include quartz (3-5 %), hematite (3-5 %), plagioclase feldspar (2-4 %), orthoclase feldspar (2-3 %), and biotite mica (1-2 %).

Type: FELDSPAR PETROFABRIC
Identifying Attributes:
This petrofabric is identified by its high abundance of orthoclase feldspar (8-9 %) and quartz (7 %). Opaque inclusions, such as hematite and magnetite, are also present (3 %). There are only minimal amounts of plagioclase feldspar, biotite mica, and hornblende (all < 1 %) noted in this paste.

Typology

The typological presentation of the Río Claro collection is alphabetic, not chronological (see Table 4.1). Appendix C provides a detailed overview of total sherd counts (by type-variety) for the classification. Generally speaking, statistical analyses are

important when conducting qualitative analyses. However, in this case the limitations of the assemblage itself have prohibited useful statistical correlations and, as such, statistical analyses have not been conducted. The assignment of individual sherds to types and/or varieties was based predominantly on a combination of vessel form and surface decoration. Where possible, comments on possible vessel function have been noted in the subsection(s) dealing with vessel form and/or surface.

Most vessel bodies from the Río Claro collection were constructed using the coiling method. Evidence suggests that coils were obliterated and/or smoothed using a variety of identifiable techniques including: "hammer and anvil**"** on larger, plain utilitarian pieces; rubbing with a hard rounded instrument (such as a bone or rubbing stone); and pulling or drawing along the coils with finger tips. In some instances thicker rims were added to the vessel and/or unique forms appear to have been built by the incremental addition of a series of elongated slabs. The execution of linear incisions and punctation marks using rounded, pointed, and wedge-shaped instruments (such as bones, sticks, reworked sherds, etc.) represents the predominant technique for rendering decoration on vessel surfaces. There is also liberal use of small appliqué *adornos* and modelled lugs, handles, and supports with appliqué accents and/or features.

Incensario types are included in this section of the typology and are the only types based entirely on form. This exception is based on the fact that I believe this form represents a decorative class (almost a mode) in its own right. In the "Basis for Definition" subsection of each type-variety description I claim a certain "number of vessels represented". In each case there exists the possibility that two (or more) of the "number of vessels represented" actually belong to the same vessel. However, in my

opinion this is unlikely given individual vessel form peculiarities, wall sizes, and unique petrofabric. All drawings are rendered with the vessel interior oriented to the right.

Río Claro Ceramics: Types and Varieties

Type: Capiro Monochrome Incensario
Variety: Capiro
Variety: Calentura
Type: Carpá Combed
Variety: Undetermined
Type: Concha Simple Incised Punctate
Variety: Concha
Variety: Zamora
Variety: Limpia
Type: Dorina Abstract Incised Punctate
Variety: Dorina
Variety: Castilla
Variety: Tarros
Variety: Arena
Type: Durango Cross-Hatch Incised Punctate
Variety: Durango
Variety: Undetermined
Type: Salamá Plain
Variety: Salamá
Variety: La Brea
Type: San Antonio Carved
Variety: Undetermined
Type: Taujica Incised Punctate
Variety: Taujica

Table 4.1. Río Claro ceramics: Types and varieties.

Type: CAPIRO MONOCHROME INCENSARIO
Variety: CAPIRO
Basis for Definition:
9 vessels represented, with one partial (almost complete) vessel (18 sherds). With regard to the almost complete example, various component sherds were distributed between two levels in a single unit dating to A.D. 680 or earlier. All other sherds are from surface collections, perhaps indicating that this type persisted throughout the Cocal Period.
Identifying Attributes:
Shallow, flaring-walled plates with direct rims and long, solid, tubular handles. Handles are often decorated with motifs from dominant types within the general collection (i.e., Dorina decorative motifs are the most common). This vessel form is alternatively known as a “Frying Pan” censer, with strikingly similar examples known from Mesoamerica and Atlantic Watershed and Central Highland Costa Rica (Chase and Chase 2007: Figure 8c;

Snarskis 1981a:68-69; Woodbury and Trik 1953). Examples from Guanacaste-Nicoya, in Pacific Costa Rica, often possess zoomorphic handles similar to some examples from the Río Claro Collection.

Paste:

Amphibolite and Feldspar petrofabrics are present. Paste colours are typically red tones (2.5YR 4/6-5/8). The overall feel is of a hard, well-made, fine fabric.

Form:

Well made flaring-walled dish served as the incense holder, with a long, tubular, solid, handle. Although the handle could be classed as an appendage, in this case the handle is an integral part of the overall vessel form. In most examples, a highly visible perforation enters the interior portion of the dish and continues length-wise through the area of articulation and much of the handle. As part of the form, appendage modes are often found modeled at the distal end of the handle. Rims of the dish portion are slightly thickened with a rounded lip. Orifice diameter ranges from 16.5-19 cm with an average of 18 cm, and vessel wall thickness ranges from 4.5-7.5 mm with an average thickness of 6 mm. Handle lengths vary from 10.8 cm to 20.8 cm in length.

Surface:

Lightly burnished, matte to low-lustre finish.

Decoration:

Vessel plate surfaces are typically undecorated (although one sherd has a single line of faint oblique jab marks on the interior rim directly below the lip). Plate rims boast small appliqué *adornos* in the cardinal position points at the lip. The dorsal surfaces of many handles associated with this variety are often decorated with Dorina Abstract Incised Punctate variety motifs. Although there is only one almost complete example in the collection (that this single example exhibits no diagnostic surface decoration or rim form may explain why no sherds of this type were retained for analysis), several long, tubular handles have been assigned to this type because they exhibit the diagnostic joint (plate to handle) at the vessel rim which is unique to this vessel form. The relatively large number of these handles suggests that this may have been a prevalent type at the site.

Associated Modes:

Serpent Head *adorno*; "Flaring-Nostril" *adorno*.

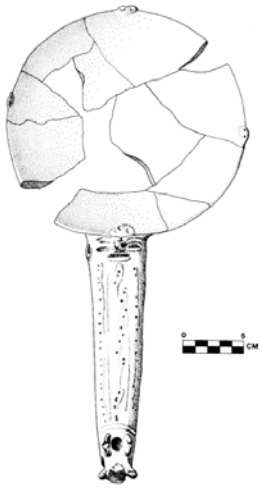
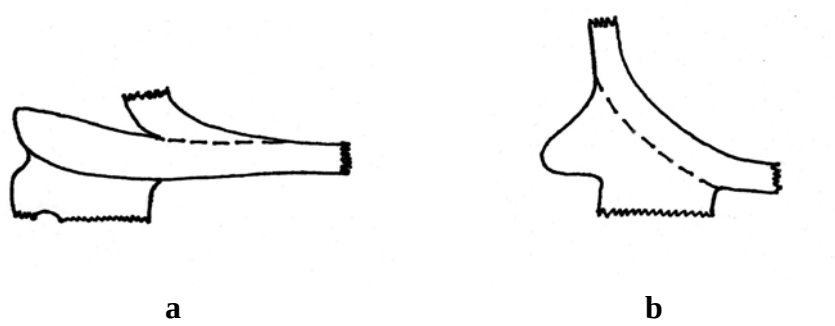


Figure 4.1. Capiro Monochrome Incensario: Capiro variety (after Healy 1978b:21).

Type: CAPIRO MONOCHROME INCENSARIO
Variety: CALENTURA
Basis for Definition:
10 vessels represented (14 sherds). All examples are from surface collections.
Identifying Attributes:
The Calentura incensario is a coarse four-legged, up-right censer, which generally has the appearance of having been made expediently. Sizable fragments in the Río Claro collection indicate that at least some of these items had two slots perforated through the base of the censer. This is the only identifiable type and form to bear four legs. Vessels with supports from northeast Honduras tend to be tripods.
Paste:
All examples have a Feldspar petrofabric. Paste colours range from tan (7.5 YR 5/4) to red (10 R 5/8) with most examples exhibiting a tan to creamy buff colour (7.5 YR 6/2-6/6). Most examples are fully oxidized but some sherds exhibiting slight core reduction are present. The overall feel of the fabric is extremely coarse and light-weight (given the overall wall thickness).
Form:
Two distinct variations of this censer form are identifiable in the Río Claro collection. In most cases, the form is a composite quadruped “plate-base” with an integrated vertical-walled bowl sitting on top. In other cases, the “plate-base” design is slightly altered to create a quadruped bowl with a basal flange. Figure 4.1 illustrates a rough cross-section for each of these form variations. All examples are coarse and thick-walled, ranging from 7.6-17.6 mm and averaging 10.2 mm in overall thickness. A single rim sherd associated with this type demonstrates a slight exterior folded rim with a flattened lip.
Surface:
Surfaces tend to be rough, and minimally finished in all cases**.** Several examples show incomplete obliteration of visible coiling and non-uniform, incomplete smoothing.
Decoration:
Only one example exhibits visible surface decoration; a large straight-walled rim/body sherd with a single, finger-impressed, horizontal appliqué fillet located approximately 8.5 cm below the lip, presumably encircling the vessel.
Associated Modes:
Vertical Groove support.



a **b**

Figure 4.2. Sample cross-sections of Capiro Monochrome Incensario: Calentura variety incensario bases; (a) "plate-base", and (b) basal flange. Renderings not to scale.

Type: CARPÁ COMBED
Variety: UNDETERMINED
Basis for Definition:
9 sherds. This type is found in almost all contexts, vertically and horizontally. Associated radiocarbon dates suggest that this type occurs at Río Claro some time after A.D. 680, with a more secure date hovering around A.D. 1200. Established by Begley (1999:128-129), Carpá Combed occurs in both Period V and VI contexts in the Culmi Valley.
Identifying Attributes:
Shallow dishes and bowls with diagnostic multi-directional "combed" striations covering the entire (?) exterior surface of the vessel.
Paste:
All Carpá sherds have a Feldspar petrofabric. Paste colours range from grey (GLEY 4/N) to tan (7.5 YR 6/3), to reddish-brown (5 YR 5/4). All examples show some degree of paste core reduction. Carpá examples are of a very coarse, hard (yet crumbly) fabric. Unlike most other types in the collection, Carpá paste tends to have many voids from the oxidization of abundant organic remains and dislocation of larger tempering particles during the execution of surface decoration.
Forms:
Flaring walled dishes and bowls with slightly outcurving rims. Rims are generally exterior thickened and lip form appears to be either pointed (i.e., tapering) or round. Calculations of orifice diameter were only accessible on two sherds, one at 24 cm and the other at 33 cm. These are typically thick-walled vessels with an average thickness of 9.8 mm. Coiled construction seems to have been the primary method of manufacture and visible coil/edge breaks are evident in many of the sherds.
Surface:
The more visible interior surface of these vessels (when in use) tends to be well-smoothed with a matte finish. The exterior is typically left rough, yet a single example from the Río Claro collection demonstrates non-intensive smoothing of the exterior surface following surface decoration. Although many of the Carpá sherds are badly soot damaged due to modern crop field burning, a few examples show evidence of light slipping. The combination of flaring walled dishes or bowls and lack of pre-depositional soot staining suggests that this type may have been used as serving vessels.
Decoration:
Multi-directional (although typically horizontal and oblique in orientation) scraping and/or combing with an instrument, such as a corncob, over the entire exterior surface of the vessel to create shallow striations in the fabric.
Associated Modes:
Undetermined (none?).

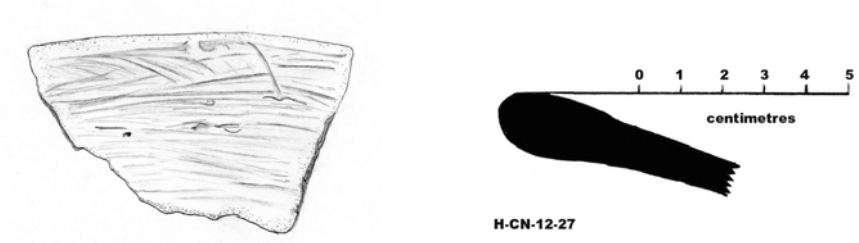


Figure 4.3. Carpá Combed: Undetermined.

Type: CONCHA SIMPLE INCISED PUNCTATE
Variety: CONCHA
Basis for Definition:
13 vessels represented (25 sherds). Almost all examples come from surface collections. Two sherds have no identifiable context information and a single sherd comes from the lowest excavation level (Pit 9) with no associated date. This unique sherd is slightly different in vessel form and rim design exhibiting an exterior folded rim. This type was initially identified by Healy (1993:212-213). Begley (1999:131) describes a strikingly similar type which he calls Keska Incised Punctate. He states that this type has only been identified in Period VI contexts in the Culmi Valley of northeast Honduras.
Identifying Attributes:
A significant refinement of Healy's (1993) initial description of the Concha type-variety has been conducted. The principal distinguishing attributes are now defined as; flaring walled dishes and bowls with roughly parallel horizontal incised lines and punctate marks below the lip, on the exterior rim of the vessel.
Paste:
Concha variety pastes display both Amphibolite (77 %) and Feldspar (23 %) petrofabrics. Paste colours range from red (10 R 5/8) to tan (7.5 YR 5/4), with most sherds falling in the rust coloured (2.5 YR 4/8-5/8) range. All examples are fully oxidized. Overall this is a hard, light-weight fabric that proved quite crumbly on the break.
Forms:
Flaring-walled, open-mouth dishes and bowls, with two examples demonstrating a slightly incurving rim. Rim forms include direct, exterior thickened and interior thickened styles with flattened/squared or rounded lips. Orifice diameters ranged from 13 cm to greater than 42 cm (two instances), with an average of 33 cm. Wall thicknesses ranged from 3.8 mm to 8.6 mm, with an average of 7.5 mm. Several sherds demonstrate clean coil breaks. A single sherd has "finger-swipes" fired into the fabric of the interior surface. This indicates that coil obliteration took place, by hand, in the production of the vessel but was never completely smoothed over.
Surface:
Most sherds demonstrate well-smoothed or lightly burnished interior and exterior surfaces with a matte to extremely low-lustre finish. The most well-burnished surfaces often seem lumpy, a residue of incomplete obliteration of the markings left from the burnishing tool. In most cases the smoothing or light burnishing was performed prior to surface decoration, yet examples are present which demonstrate burnishing after surface decoration has been applied. Remains of slipping and self-slipping are evident on several sherds. Two sherds exhibit slip crazing on the interior surface, two sherds on the exterior surface, and a single sherd on both interior and exterior surfaces. The precise function of these vessels is not readily apparent, but form and surface treatment suggest that thicker walled Concha variety vessels may have been used for food preparation, while thinner walled and smaller vessels may have been used for serving food.
Decoration:
Decoration involves the execution of parallel horizontal bands of alternating (single or double) linear and punctate incision below the lip, on the exterior rim of the vessel. The predominant sequence in the Río Claro collection is of a single or double linear incision framed by a single line of punctations. However, two sherds exhibit a single line of

punctations framed by a single linear incision and yet another sherd shows four bands of alternating double linear incision and single lines of punctates. The inherent “quality” of surface designs varied widely, with some sherds having designs deeply executed and well-defined, while other sherds show sloppy, shallow, and often haphazard execution of both punctate and linear incising. In some cases, punctation marks might better be referred to as linear, oblique jab marks. Tools used to execute these designs varied widely as well. Pointed, round, hollow (reed?), and wedge-shaped instrument use is evident.

Associated Modes:

Undetermined.

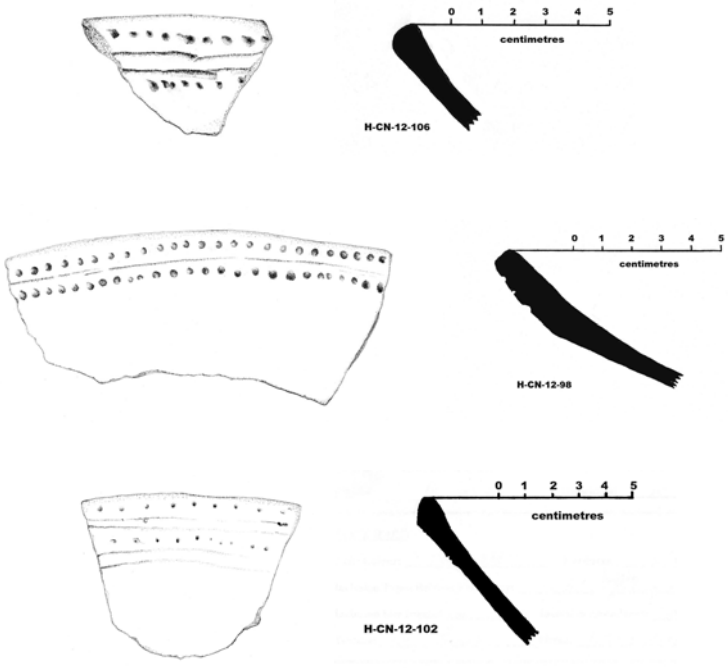


Figure 4.4. Concha Simple Incised Punctate: Concha.

Type: CONCHA SIMPLE INCISED PUNCTATE

Variety: ZAMORA

Basis for Definition:

4 vessels represented (5 sherds). Excavated from near-surface contexts with a single secure date just prior to A.D. 1255.

Identifying Attributes:

This variety is typified by shallow dishes bearing a single undulating horizontal linear incision with single, interlaced punctate accents. This motif encircles the interior rim, below the lip of the vessel.

Paste:

Amphibolite and Feldspar petrofabrics are equally represented. Paste colours are tan to brown (7.5 YR 4/2-6/1 to 5 YR 4/4). Reduced cores and/or surfaces were present in all

but one example. Overall, pastes of this variety are hard, compact, and grainy.

Forms:

Forms are typically dishes with flaring walls and narrow, outcurving rims. All rims are interior thickened with rounded lips. Orifice diameters average 34 cm. Wall thicknesses range from 5.4 mm to 8 mm. Vessel bodies of this variety are coiled construction.

Surface:

The interior surfaces of every sherd was well-smoothed to slightly burnished, with two examples showing a very low-lustre finish. The exterior of each sherd is also smoothed, but with visibly less care and/or attention. A single sherd demonstrates crazing on the interior suggestive of a well-executed slip. Examination of vessel form and surface treatment suggests that this variety may have been used for serving food.

Decoration:

All examples exhibit a single, horizontal, undulating incised line encircling the interior rim, directly below the lip of the vessel. Each undulation is accented by a single punctate impression.

Associated Modes:

Undetermined.

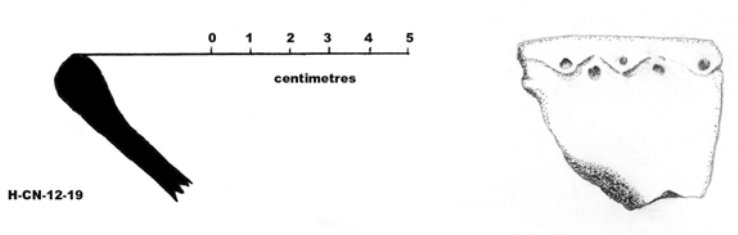


Figure 4.5. Concha Simple Incised Punctate: Zamora.

Type: CONCHA SIMPLE INCISED PUNCTATE

Variety: LIMPIA

Basis for Definition:

5 vessels represented (6 sherds). All examples are from surface collections.

Identifying Attributes:

Flaring-walled bowls with linear bands of angled jab marks framed by single or double bands of linear incision which encircle the exterior portion of a raised vertical or raised and slightly incurving rim.

Paste:

All Limpia variety sherds demonstrate an Amphibolite petrofabric. Paste colours ranged from brown (5 YR 4/6) to red (10 R 4/6). Limpia sherds appear fully oxidized. Overall this is a hard, fine paste that presents a clean break. In fact, these were the most difficult of all sherds to sample for analysis. My personal notes contain comments such as “nice paste”, “breaks clean”, “difficult to break”, and “fine and light-weight”. Although there was great variation in the amount and size of temper material used, this did not seem to affect the end result of a hard, fine paste.

Forms:

Wide-mouth bowls with flaring walls and slightly incurving or vertical rims. Rims tend to be exterior thickened, with a single instance of interior thickening present in the

collection. Lips include flat, pointed, and beveled forms. There are two discernable size classes of bowl within this variety. The first is large, thick-walled (averaging 7.6 mm) bowl with a wide orifice diameter (averaging 36.5 cm). The second is a thin-walled (averaging 6 mm) version with a much smaller average orifice diameter (21.6 cm). Coil breaks are evident at the rim of several sherds suggesting that this was the primary construction technique. Similar to Concha variety vessels, large, thick walled Limpia variety vessels may have been used for food preparation and/or serving, while thinner walled vessels were more than likely used for serving food.

Surface:

In almost all examples, interior and exterior surfaces are very well-smoothed or lightly burnished, giving the vessel a low-lustre appearance. Low intensity burnishing took place after the surface decoration had been executed. This is evident in the displacement of incision margins during the finishing process. Despite the quality of the fabric, each sherd in this variety exhibits surface voids, presumably from the oxidization of organic materials during firing. These voids in the surface present a rough appearance. Evidence of slipping and self-slipping occur on both the interior and exterior of several sherds. In one case, thick striations of are visible from the wiping motion during self-slipping (i.e., with a wet hand, cloth, or grass).

Decoration:

A single horizontal line of angled punctate or jab marks encircles the exterior raised rim, framed by single or double horizontal bands of linear incising. All incision and punctate design demonstrate deliberately deep and expedient execution. Sherds often display poorly-defined technique and the use of wedge-shaped implements in design execution. The use of multiple incising tool forms on a single vessel is not uncommon. Surface decoration and finishing techniques appear extremely sloppy in several instances, which seems odd when contrasted with the quality of the vessel fabric. A single sherd demonstrates an *adorno*-style raised design technique which interrupts the decorative frame surrounding the vessel rim. In this instance three wide and deep punctuations form a triangle (see top right photo in Figure 4.6).

Associated Modes:

Undetermined.

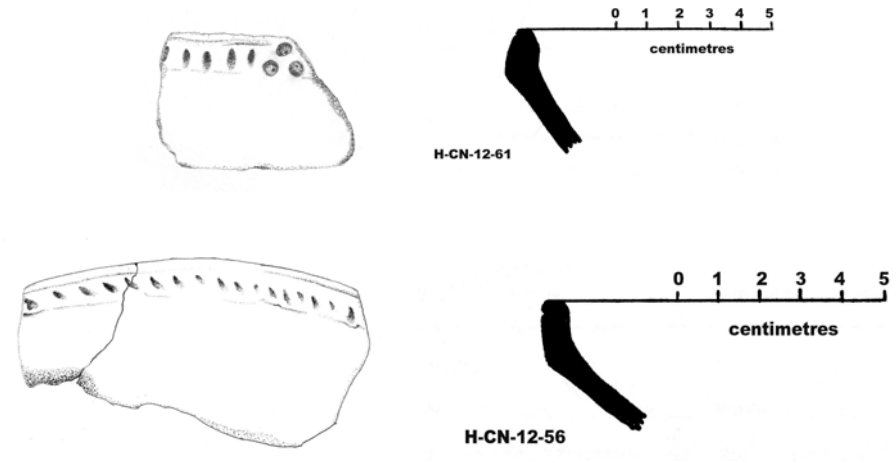


Figure 4.6. Concha Simple Incised Punctate: Limpia.

Type: DORINA ABSTRACT INCISED PUNCTATE
Variety: DORINA
Basis for Definition:
29 vessels represented (42 sherds). Almost all examples are from surface collections, with the exception of several sherds recovered from Pit 9 (having no associated radiocarbon date), which were evenly distributed throughout all levels of the excavation unit. This type was initially identified by Healy (1993).
Identifying Attributes:
Healy (1993:209-212) describes this type as being represented by "predominantly exterior decoration with "lazy S" or abstracted curvilinear line scrolls, usually incised (sometimes painted), and offset by punctation (or jab) marks; smoothed and lightly slipped surface...". In my refinement of this type, the Dorina variety demonstrates abstract curvilinear (lazy S) motifs as double, triple, and in some cases quadruple interlacing sets of design highlighted by multiple and sometimes linear punctate accents either offsetting the "lazy S" design or serving to denote the end of one motif "set" and the beginning of the next. This interlaced abstract incised motif is typically framed at the vessel rim by double linear incised bands running the circumference of the rim. Cuddy (2007:93-95) recently referred to this "lazy S" decorative style as a "waves-and-foam" motif, which he suggests held great ideological significance among groups in northeast Honduras. This type-variety represents the most elaborately decorated rendition of the overarching Dorina Abstract Incised Punctate type.
Paste:
Amphibolite (41 %) and Feldspar (59 %) petrofabrics are almost equally represented. Paste colours include vibrant red tones (2.5 YR 4/6-5/8), orangey-brown tones (5 YR 4/6-6/6), brown to tan tones (7.5 YR 4/2-6/4), and grays (GLEY2 5/5BG-6/10BG). However, vibrant red and orange paste colours predominate. The majority of Dorina variety sherds appear to be fully oxidized with only a few sherds showing minor amounts of core reduction. It is notable that two bowl sherds have a grey, presumably reduced fabric with seemingly intentional interior or exterior surface oxidization. This selective oxidization must have occurred rapidly and at high heat to create such a vibrant slip. Overall feel of Dorina variety paste ranges from coarse and crumbly to hard and well-made fabrics.
Forms:
Three specific vessel forms epitomize this type-variety class; restricted-orifice *tecomates* with interior thickened rims, open-mouth bowls with slightly flaring walls and exterior folded rims, and shallow flaring-walled dishes with outcurving, interior thickened or exterior folded rims. *Restricted-orifice tecomates* have interior thickened rims and a typically rounded lip. However, a variety of lip forms including beveled, pointed, and flattened examples do exist. Wall thickness ranges from 4.8 mm to 11 mm, with an average of 7.6 mm. Orifice diameters average 31 cm, indicating that restricted-orifice bowl forms were quite large. *Open-mouth bowls* generally have slightly outflaring walls and exterior folded rims (although individual examples of interior thickened and tapered rims exist) with rounded, pointed, flattened, or beveled lips. Wall thickness ranges from 3.4 mm to 7.8 mm, with an average of 5.7 mm. Orifice diameters range from 11.5 cm to 35 cm (with an average of 23 cm), indicating great variation in overall vessel size. *Flaring-walled dishes* boast a variety of rim forms including direct, interior thickened, exterior thickened, and exterior folded examples associated with either rounded or

pointed lips. Wall thickness ranges from 4.1 mm to 7.8 mm, with an average of 6.3 mm. Orifice diameters average 36 cm, with no marked variation in overall dish size. A single sherd with diagnostic Dorina variety decoration has a vessel form unique to both the variety and the entire Río Claro collection. This rim sherd represents what appears to be a small jar with incurved sides, extremely restricted orifice (6 cm orifice diameter), and a broad-flaring, out-curved rim (12 cm rim diameter). A modern-day analogue to this form would be a miniature spittoon.

Surface:

Almost all sherds demonstrate a well-smoothed or lightly burnished vessel surface, both interior and exterior, generally with a matte or very low-lustre finish. The interior surface of every Dorina variety restricted-orifice bowl sherd is heavily pitted. This is the only vessel form (and variety) that demonstrates this unique pitting. Notably, this vessel form is associated with Appliqué Modelled Anthropomorphic lugs which often show signs of wear (or rubbing) on the underside. This wear looks similar to that seen on vessel support tips. However, this wear may have come from suspending the bowl (pot?) by the lugs between two rocks and over a fire. Whether the interior pitting is the result of excessive reheating, battering with a stirring implement, acidic content, or some other factor is currently unknown. All other forms appear to have been used for serving food, particularly the shallow dish forms. Self-slipping seems to be the primary surface manipulation, but artificial slips are also evinced in the collection.

Decoration:

On *tecomate* and open-mouth bowl forms, the decoration is located on the exterior rim. Alternatively, shallow dishes demonstrate decoration on the interior rim of the vessel. Abstract linear (lazy S) motifs as double, triple, and in some cases quadruple interlacing sets of design highlighted by multiple and sometimes linear punctate accents either offsetting the “lazy S” design or serving to denote the end of one motif “set” and the beginning of the next. This interlaced abstract incised motif is typically framed at the vessel rim by double linear incised bands running the circumference of the rim. Although not present in all Dorina sherds, another diagnostic feature of all Dorina varieties is the use of a single horizontal course of linear punctate encircling the outer edge of all rim sherds with an exterior folded form. This is most commonly associated with flaring-walled bowl forms. In almost all cases, the “lazy S” begins low on the left side and rises towards the right. A few examples, however, have the “lazy S” beginning high on the left and falling towards the right. This may indicate different handedness among potters at the site.

Associated Modes:

Elaborate Appliqué “Loop” handle; Minor Serpent Head *adorno*; Elaborate Appliqué Incised strap handle.

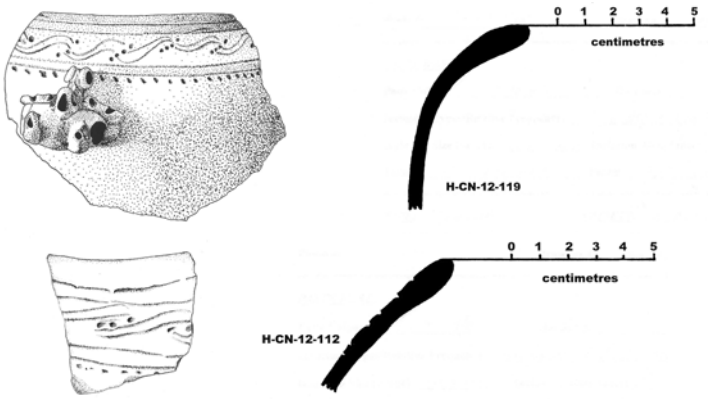


Figure 4.7. Dorina Abstract Incised Punctate: Dorina, *tecomate* forms.

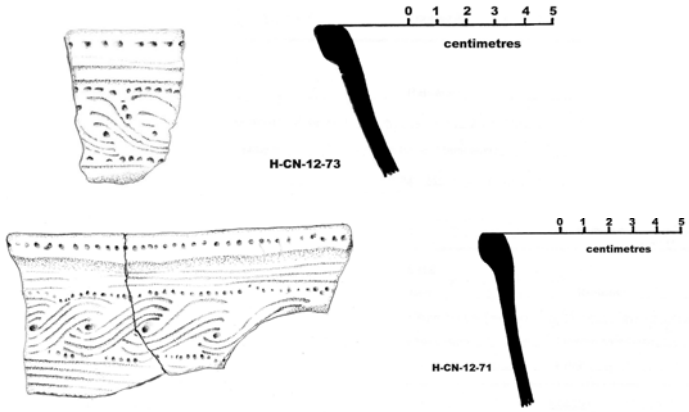


Figure 4.8. Dorina Abstract Incised Punctate: Dorina, open-mouth bowls.

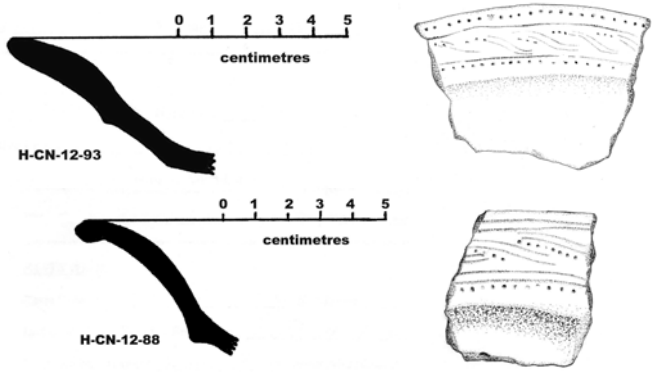


Figure 4.9. Dorina Abstract Incised Punctate: Dorina, shallow dishes.

Type: DORINA ABSTRACT INCISED PUNCTATE
Variety: CASTILLA (SINGLE INCISED)
Basis for Definition:
15 vessels represented (17 sherds). This variety is well distributed diachronically at Río Claro. Examples come from the earliest depths (one level above a radiocarbon date of A.D. 680); also from secure contexts at A.D.1105; and many surface finds.
Identifying Attributes:
Encircling the vessel rim are alternating instances of a single "lazy S" incised motif and single punctate accent. In the Río Claro collection, this abstract incised motif is framed by a single linear incised band running the circumference of the rim.
Paste:
Feldspar (87 %) and Amphibolite (13 %) petrofabrics are both present. Paste colours are predominantly tan to orange (7.5 YR 5/4-6/6; 5 YR 4/6-6/6) and red (2.5 YR 4/8-5/8) tones, with few examples of brown (10 YR 4/2) Sherds show almost equal examples of fully oxidized, incompletely oxidized, and fully reduced cores. Overall, two types of fabric seem to be represented; a hard, fine paste and a gritty coarse paste.
Forms:
Wide-mouthed bowls with (sometimes extremely) flaring walls and vertical or slightly flaring rims. Rims are either interior or exterior thickened and tend to have pointed or rounded lip forms, although beveled, square, and flattened lips are present in small numbers. Orifice diameters range from 23 cm to greater than 42 cm, with an average of 33 cm. Wall thickness ranges from 5.7 mm to 11.4 mm, with an average thickness of 8.3 mm. This suggests a wide range of Castilla vessel sizes were used at Río Claro. Clear coil breaks are evident in more than half the sherds in this variety.
Surface:
Many sherds of this variety have eroded (or over-zealously cleaned) surfaces. Those sherds that are not eroded demonstrate typically smoothed interior and exterior surfaces with matte finish. However, two sherds exhibit intensive burnishing and low-lustre surface finish. Slipping and self-slipping surface techniques are evident. Similar to Dorina variety vessels, some of these bowls appear to have been used for cooking, with evidence of pre-depositional soot staining and pitting on the interior surface. Other appear to have used for serving or preparing food.
Decoration:
Wrapping around the circumference of the exterior vessel rim are alternating instances of a single "lazy S" incised motif and single punctate accent framed by a single linear incised band. In two instances this diagnostic decorative frame is underscored by double linear incised bands at the bottom of the frame. Some of the Castilla incising and punctation marks tend to be wide (up to 2.5 mm) and deep (up to 3 mm).
Associated Modes:
"Flared-Nostril" Appliqué *adornos* are noted at the exterior lip/rim edge of one sherd. A single complete Concha: Limpia vessel in the Smithsonian Institution's northeast Honduras collection (catalogue #A373338) indicates that this variety is associated with the Vertical Groove support mode.

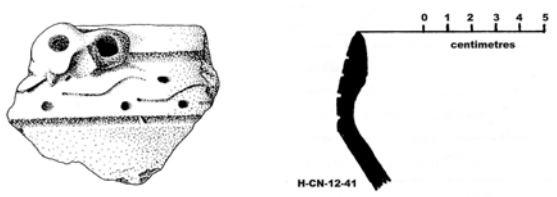


Figure 4.10. Dorina Abstract Incised Punctate: Castilla.

Type: DORINA ABSTRACT INCISED PUNCTATE
Variety: TARROS (APPLIQUÉ)
Basis for Definition:
6 vessels represented (8 sherds). All examples are from surface collections.
Identifying Attributes:
Tarros variety bowls exhibit a highly diagnostic combination of appliqué design and common Dorina variety abstract incised motifs. There are two unique design forms represented; the appliqué-lattice motif and abstract-appliqué motifs.
Paste:
Examples of Feldspar (67 %) and Amphibolite (33 %) petrofabrics are present. Paste colours are predominantly brown to tan (7.5 YR 4/4-5/4) with single sherds demonstrating orange (5 YR 5/6) and red tones (2.5 YR 5/6) as well. Most examples appear fully oxidized. Overall this is hard, light weight paste that demonstrates a clean break.
Forms:
Slightly round-walled bowls with incurving, outcurving, and in one case, direct rims. Overall vessel size is relatively small when compared to most of the Río Claro sherds. Exterior folded rims are typically associated with rounded lips, but flattened lips are also known. Orifice diameters ranged from 10 cm to 20 cm with an average diameter of 16 cm. Wall thicknesses average 5.7 mm. Coiled construction is evident.
Surface:
Most sherds demonstrate a well smoothed or lightly burnished interior and exterior vessel surface with matte finish. Several sherds have well-preserved evidence of surface finishing techniques. For example, two sherds retain a significant number of vertical and horizontal striations created during surface smoothing. In one instance striations from initial surface smoothing have been lightly burnished into the surface of the fabric. Several sherds also have large voids in the fabric surface, presumably from the oxidization of excess organics during firing. Finally, in many cases the interior surfaces show heavy surface pitting. These relatively small and thin walled bowls appear to have been used for food serving, perhaps for holding liquids or wet meals, such as a stew or soup.
Decoration:
The appliqué-lattice motif consists of strips of appliqué crisscrossed to form what looks like a lattice work. The juncture points of each crisscross strip are typically marked by a single punctate depression. In each instance, the latticing always occurs on the exterior, framed by a single band of linear appliqué, and is located directly below an exterior thickened rim. The abstract-appliqué motifs are not as standardized as the appliqué-lattice

motif but tend to demonstrate the use of linear appliqué and appliqué pellets with punctate decorations. Decoration is always located on the exterior rim of the vessel and typically has an additional frame of incised punctate decoration (Dorina: Dorina decorative motifs are common) running horizontally below the appliqué frame. Tarros examples generally have the diagnostic single horizontal lines of punctation marks encircling the outer edge of all exterior folded rim forms.

Associated Modes:

Undetermined.

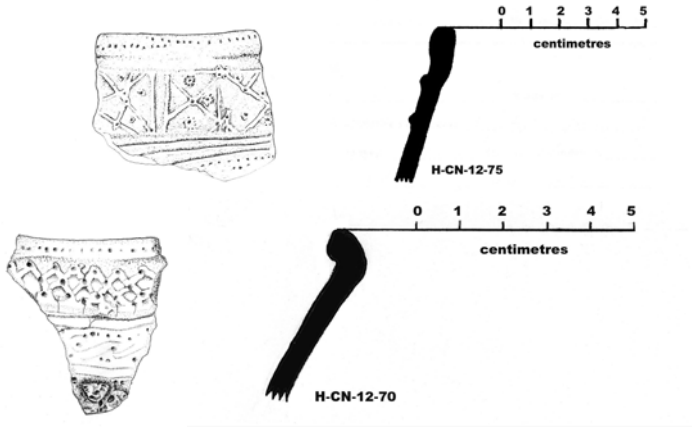


Figure 4.11. Dorina Abstract Incised Punctate: Tarros.

Type: DORINA ABSTRACT INCISED PUNCTATE

Variety: ARENA

Basis for Definition:

11 vessels represented (14 sherds). All examples come from relatively deep levels from throughout the site with the majority of sherds being associated with the lowest levels of three discrete mounds. Unfortunately, only one of the mounds has an associated radiocarbon date. One sherd from this unit comes from the level directly below (150-175 cm) a dated sample of A.D. 680 (at 125-150 cm), and two sherds derive from the immediate two levels (100-125 cm and 75-100 cm, respectively) above the A.D. 680 date.

Identifying Attributes:

Flaring-walled bowls and bowls with slightly incurving walls demonstrate vertical or horizontal curvilinear “lazy 8” incised designs offset by single punctation marks and (in some cases) vertical linear incising. This variety is highly reminiscent of Healy’s (1993:207, fig. 11.14) Río Aguán Incised Scroll and Punctate type dating to the Transitional Selin Period (A.D. 500-1000). Due to the deep contexts from which these sherds were recovered; they may actually represent a diachronic transition from Río Aguán to Dorina design styles.

Paste:

All sherds exhibit a Feldspar petrofabric. Paste colours range from grey (GLEY2 6/10B) to orangey-brown (5 YR 5/6-6/6) and red tones (2.5 YR 5/6-5/8). Most examples appear

fully oxidized with only a few sherds demonstrating slight core reduction. Overall, Arena variety sherds tend to be of either a gritty, crumbly paste which is prone to severe surface erosion, or a hard, light-weight fabric that makes a “clinking” noise when tapped with a fingernail.

Forms:

Flaring, relatively thin-walled bowls typically demonstrate exterior folded rims with rounded or flattened lips, but interior and exterior thickened examples with flattened lips are present. Bowls with slightly incurving walls tend to have exterior folded rims and flattened lips. Orifice diameters range from 16 cm to 39 cm, with an average of 30 cm overall. However, more than half of the sherds were too small to garner an accurate assessment of orifice diameter, so this range and average are tentative for this portion of the Río Claro collection. Wall thickness averaged 6.1 mm. Vertical, jagged, and horizontal coil breaks are evident.

Surface:

Many of the sherd surfaces were badly eroded in this variety. However, better preserved sherds demonstrate well-smoothed or unevenly burnished surfaces. Some sherds show clots of dried slip in punctate impressions. Self-slipping seems to be the predominant surface treatment in the Arena variety. Many sherds show evidence of large paste inclusions being displaced and dragged across the vessel surface during final smoothing and burnishing, finishing techniques which were typically executed after surface decoration had been applied. These bowls appear to have been used for serving food.

Decoration:

On flaring-walled bowls the “lazy 8” motif runs horizontally around the exterior rim and is framed by single or double horizontal incised lines. Punctation on other Dorina varieties is generally used to *delimit* the start or end of single motif iterations. However, Arena variety punctation is located *within* each looping tail of the “lazy 8”. On bowls with slightly incurving walls the “lazy 8” motif iterates vertically and is associated with intermittent frames of vertical linear incisions which begin and terminate with punctation marks. This central motif is framed by double bands of linear incising. In addition, these later examples generally have the diagnostic Dorina single horizontal course of linear punctate encircling the outer edge of all exterior folded rim forms.

Associated Modes:

Elaborate Appliqué Incised strap handles.

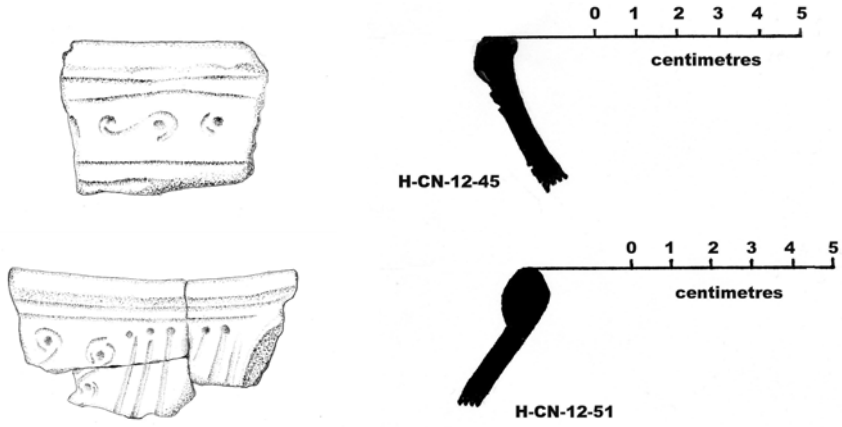


Figure 4.12. Dorina Abstract Incised Punctate: Arena.

Type: DURANGO CROSS-HATCH INCISED PUNCTATE
Variety: DURANGO
Basis for Definition:
7 vessels represented (10 sherds). All examples come from surface collections, which suggest a Late Cocal date (A.D. 1400-1530).
Identifying Attributes:
Composite silhouette dishes, and sometimes flaring-walled dishes and bowls, show diagnostic single or double incised cross-hatching design, or "X", framed with horizontal linear incised and punctate accents. These dishes are consistently associated with minor Serpent Head *Adornos* and Stylized Human Head supports.
Paste:
Almost all sherds exhibit Amphibolite petrofabric. Only a single example, whose form and decorative style are unique within this variety, demonstrates a Feldspar petrofabric. Overall, this is a fine, hard, well-made paste which clinks sharply when tapped with a fingernail and exhibits a well-defined, clean break. Paste colours range from brown and tan tones (7.5 YR 4/3-6/6) to red tones (2.5 YR 4/6-5/6). This colour range reflects the overall degree of oxidization. In this variety, tan tones are the result of incomplete oxidization of vessel during firing.
Forms:
Typical forms are open-mouth composite silhouette dishes and flaring-walled dishes and bowls. All examples exhibit out-curving rims and rounded or pointed lips. Orifice diameters range from 12-28 cm. Wall thicknesses range from 5-9.2 mm.
Surface:
Most sherds exhibit well-smoothed or lightly burnished, low-lustre, interior and exterior surfaces. Other sherds show fine erosion (due to the fine paste) on exterior surfaces. Most examples demonstrate evidence of both slipping (painting) and self-slipping finishing techniques, as well as a well-seasoned patina of use wear on the interior vessel surface.
Decoration:
Shallow, single, and infrequently double, incised cross-hatch designs, or "X's", are located on the exterior vessel rim. The "joining points" (where the two lines creating the "X" meet and where the "X" tails meet as the motif repeats) of each cross-hatch are marked with a punctation or a rounded depression. This cross-hatched motif is typically framed, either above or below the central "X" motif, with horizontal linear incised and punctate accents (i.e., Figure 4.13). The execution of this decoration is often sloppy or careless, but typically well-defined. In many cases it appears to have been conducted quite expediently, or carelessly, especially when compared to the care taken in clay preparation and vessel construction. These ornate dishes were more than likely used for serving food. There is absolutely no evidence that they were used for food preparation.
Associated Modes:
Minor Serpent Head *Adorno*; Stylized Human Head supports.

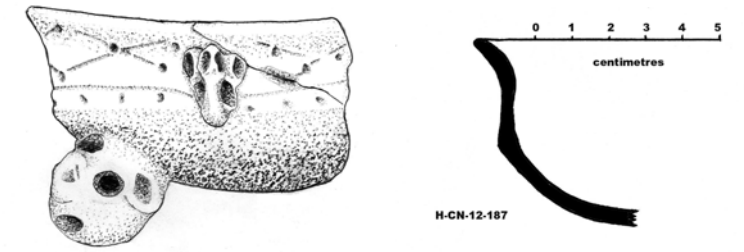


Figure 4.13. Durango Cross-Hatch Incised Punctate: Durango.

Type: DURANGO CROSS-HATCH INCISED PUNCTATE
Variety: UNDETERMINED
Basis for Definition:
6 vessels represented (8 sherds). All examples come from surface collections, which suggest a Late Cocal date (A.D. 1400-1530).
Identifying Attributes:
Composite silhouette dishes and flaring walled dishes and bowls have all the indicators (i.e., form and associated modes) of belonging to the Durango type but lack surface decoration. It is unclear whether or not these sherds merely represent undecorated portions of Durango variety vessels. These examples are consistently associated with minor Serpent Head *Adornos* and Stylized Human Head supports.
Paste:
Amphibolite (67 %) and Feldspar (33 %) petrofabrics are present. Overall, this is a fine, hard, well-made paste which clinks sharply when tapped with a fingernail. Paste colours are typically fully oxidized red tones (2.5 YR 4/6-5/6). Two examples show incomplete oxidization and associated brown-tan tones (7.5 YR 4/2 and 5 YR 5/6).
Forms:
Flaring-walled dishes and bowls predominate, with single examples of composite silhouette and rounded-wall forms. All examples exhibit out-curving rims and rounded or pointed lips. Orifice diameters, where attainable, range from 30-36 cm. Wall thicknesses range from 5.2-7.2 mm. Coiled construction is evident.
Surface:
Most sherds exhibit well-smoothed or lightly burnished, low-lustre, interior and exterior surfaces. Other sherds show fine erosion (due to the fine paste) on exterior surfaces. Most examples demonstrate evidence of both slipping (painting) and self-slipping finishing techniques, as well as a well-seasoned patina of use wear on the interior vessel surface. This suggests that these vessels were used strictly for serving food.
Decoration:
None.
Associated Modes:
Minor Serpent Head *Adorno*; Stylized Human Head supports.

Type: SALAMÁ PLAIN
Variety: SALAMÁ
Basis for Definition:
16 vessels represented (19 sherds). All Salamá sherds come from surface, or near-surface collections with the exception of a single sherd. This sherd is notably different (well executed and finished) than the other sherds but fits within this type description.
Identifying Attributes:
Coarse ware, utilitarian open-mouth bowls and vases, as well as restricted-orifice bowls with vertical rim. Salamá variety vessels are often associated with crudely made D-shaped strap handles.
Paste:
Feldspar petrofabric predominates, with only one sherd exhibiting Amphibolite petrofabric. Paste colours are typically brown to beige/tan tones (7.5 YR 2.5/1-6/4) or brownish-orange to orange (5 YR 4/2-6/4) tones. However, the majority of sherds exhibit some degree of reduction; ranging from incomplete oxidization to fully reduced cores. This will ultimately affect the amount of "brown" tone witnessed in the paste. Fully oxidized sherds demonstrate red tones (10 R 4/8 to 2.5 YR 4/6-5/6). Overall paste can be characterized as either a hard, light weight but fairly friable paste or as an extremely coarse, heavy paste that is difficult to break.
Forms:
Two specific vessel forms epitomize this variety; large, open-mouth bowls and vases with incurving or outcurving rims and smaller bowls with incurving walls and vertical rims. Both forms generally exhibit crudely-executed exterior folded, interior thickened and direct rims with either rounded or flattened lips. One sherd demonstrates an interior beveled lip. Wall thicknesses ranged from 4.5 mm to 12 mm, averaging 6.8 mm. Large bowls have orifice diameters ranging from 22 cm to 33 cm and bowls with vertical rims demonstrate wide variety of orifice diameters ranging from 9 cm to 29 cm. On the smallest, most globular renditions of this vessel form it was impossible to get an accurate assessment of orifice diameter due to the "tiny" nature of the sherd or curvature profile. Coiled construction is evident in several diagnostic breaks. Vertical and horizontal coil breaks on sherds with vertical rims suggests that the vertical rim section was built from slabs and attached to the vessel later in the production sequence.
Surface:
Salamá variety surface treatments range from minimally smoothed (extremely coarse) to lightly burnished, with matte or low lustre finish. One interesting sherd exhibits burnishing occurring on the diagonal across the surface, giving the surface an odd look. In many instances there are large drag marks of voids where large paste inclusions were dragged across the vessel surface or dislodged during finishing. Several sherds from larger vessels have evidence of paddle or pounding "dents"/impressions from coil obliteration in the vessel production sequence which was never completely smoothed out. Many sherds have a lumpy, inconsistent surface. Several sherds show evidence (application striations and surface crazing) of "sloppy" slip application or self-slipping technique. Many sherds show large voids in the fabric due to oxidization of organic material during firing. Heat-induced crazing is common on most of the larger examples. Lack of vessel base information inhibits a thorough discussion of function for this variety. However, it seems that they were more than likely used for food preparation,

especially cooking. Alternatively, the large organic voids in the fabric may have been intentional to allow for condensation necessary to keep stored liquids (such as water) cool.

Decoration:
None.

Associated Modes:
Expedient D-shaped strap handles; Elaborate Appliqué "Loop" handles.

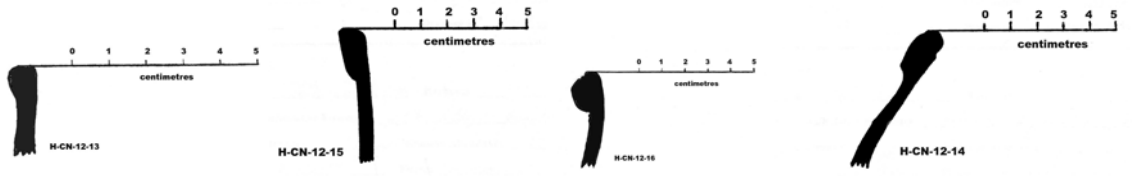


Figure 4.14. Salamá Plain: Salamá, rim profiles.

Type: SALAMÁ PLAIN
Variety: LA BREA
Basis for Definition:
13 vessels represented (15 sherds). All examples, save one, are from surface collections. Interestingly, the single example (two sherds) not from the surface is a very well-made vessel from deep strata associated with a radiocarbon date of A.D. 680.

Identifying Attributes:
Well-made and well-finished shallow, flaring-walled dishes with short impressed-fillet *adornos* on the exterior of the vessel at the base of the rim.

Paste:
Feldspar (77 %) and Amphibolite (23 %) petrofabric types are present. Paste colours are predominantly tan to orange tones (7.5 YR 5/6-6/6 to 5 YR 4/6-6/6). The majority of sherds appear fully oxidized, although instances of incomplete oxidization and slight core reduction are present. Overall, La Brea sherds are of a hard, compact, well-sorted paste.

Forms:
La Brea variety vessels are well-made, flaring-walled, shallow dishes with interior and exterior thickened rims. Lips are typically rounded, but pointed forms are also present. Wall thicknesses seem fairly standard, ranging from 5.3 mm to 7.8 mm and averaging 7 mm. Orifice diameters range from 22 cm to 35 cm, and averaging 30 cm overall.

Surface:
Most sherds in this variety exhibit a burnished, matte to low lustre finish. However, there are examples which show only a rough smoothing of the vessel surfaces as evidenced by visible striations, or swipe marks in the fabric. Despite the overall fine surface finish, many examples demonstrate voids in the fabric from dislodged inclusions or the oxidization of organics during the firing process. Some also show drag marks where larger inclusions were pulled across the surface during the finishing process. More often the interior surface has the greatest lustre, but I am unable to ascertain whether this is the result of vessel finishing or a patina from use-wear. A single sherd exhibits a post-

production, drilled crack-lacing hole that suggests the vessel was a “keeper”. Other sherds show patches of surface wear, presumably from extended rubbing or scuffing. These two snippets of evidence seem to suggest that the low-lustre interior surfaces may in fact be a patina of long term use wear. Only a single sherd exhibits any evidence for slipping and this appears to have been restricted to an exterior self-slip below the rim. All of this evidence suggests that La Brea variety vessels were used expressly for serving food.

Decoration:

None. One notable exception is a single example that exhibits Dorina Abstract Incised Punctate (Dorina variety) motifs on the interior rim of the sherd.

Associated Modes:

Tool/Finger Impressed Fillet.

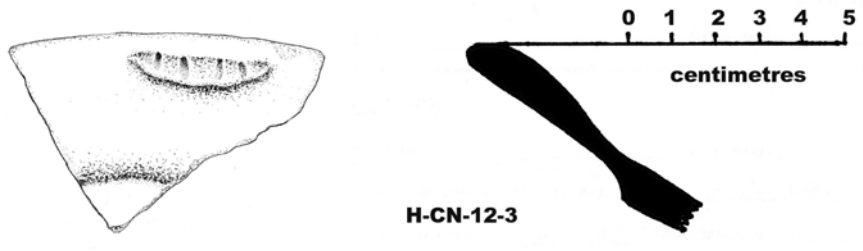


Figure 4.15. Salamá Plain: La Brea.

Type: SAN ANTONIO CARVED

Variety: UNDETERMINED

Basis for Definition:

7 vessels represented (11 sherds). Identified by Healy (1993) as occurring in the Terminal Selin Period (A.D. 800-1000) or late Period V. Several examples come from the lowest levels of excavation (one sherd coming from the level above a radiocarbon date of A.D. 1045), while others are known from surface collections

Identifying Attributes:

Healy (1993:209) describes important San Antonio attributes as “carved and incised decoration in geometric patterns and/or stylized faces; elaborate carved appliqué lugs depicting stylized animal forms; orange to brown slip; cylinder vase with lugs and ring stand base”. The stylized face, with its diagnostic appliqué nose and curvilinear incised “eyebrows” is typically associated with a “tie”; a vertical incised pattern running from the bottom of the face toward the base of the vessel.

Paste:

Amphibolite and Feldspar petrofabrics are present in almost equal amounts. Paste colours include mainly orange and red tones (5 YR 4/6-6/8 to 2.5 YR 4/8-5/8). Feldspar petrofabric examples tend to be of a hard, yet powdery paste. Amphibolite petrofabric, on the other hand, tend to be extremely hard, fine pastes that make a “clinking” noise when tapped with a fingernail. Inclusions tend to be very fine in almost all examples, with temper material being visible only under the microscope.

Forms:
Straight-walled vase and/or jar forms with exterior folded rims and rounded lips. One example shows a basal flange which mimics a ringstand base. Only one rim sherd was present in this portion of the Río Claro collection, as such orifice diameters were not calculated. Wall thicknesses ranged from 3.6 mm to 7.2 mm. However, it should be noted that two of the sherds showed extreme variation in wall thickness on a single sherd with one example ranging from 3.7 mm to 12.7 mm over a surface area of less than 5 cm. Coiled construction is evident from exposed breaks.

Surface:
Two distinct surface treatments, mainly based on the paste type, occur in this collection. The first is a smoothed, powdery surface which seems to have been extremely prone to erosion. The second is a burnished surface with low-lustre finish. Traces of exterior slipping are evident in three examples. Whether or not these vessels were used for the preparation or serving of food is uncertain. The ornate nature of these vessels (decoration and form) suggests instead that they were effigy vessels.

Decoration:
Two stylistic variations are represented in the Río Claro collection. The first variation demonstrates simple linear and often undulating incised lines. The second variation includes sherds with the diagnostic San Antonio carved face and "tie". However, body sherds from surface and near-surface contexts demonstrate extreme use of alternating curvilinear incising and punctate. Later examples also exhibit use of appliqué finger/nail-impressed, or pinched filleting. This variation occurs in later contexts including the top strata of excavated units and surface collections (clear Dorina variety connections in the decoration).

Associated Modes:
Undetermined.

Figure 4.16. San Antonio Carved: Undetermined (H-CN-12-129).

Type: TAUJICA INCISED PUNCTATE
Variety: TAUJICA
Basis for Definition:
3 vessels represented (three sherds). All Taujica variety sherds are from surface collections.
Identifying Attributes:
Restricted-orifice jars with outcurving or outflaring rims, and unique, diagnostic horizontal and oblique linear incised and punctate designs on the exterior vessel shoulder.
Paste:
All sherds exhibit Feldspar petrofabric. Paste colours are orange to red tones (5 YR 5/6-6/6 and 2.5 YR 4/8). All sherds are light weight, coarse and crumbly on the break. All examples appear fully oxidized.
Forms:
Taujica vessels are quite distinctive in the Río Claro collection. They are jars with relatively thin, incurving walls and outcurving or vertical rims with rounded lips. In this case I was able to measure rim diameters, but orifice diameters were too difficult because of sherd structure and size. Rim diameter averaged 6 cm. Wall thickness ranged from 5 mm to 6.4 mm. There is typically a significant thickening of the vessel wall where the rim has been attached and blended to the vessel shoulder. The forms represented in this small sample suggest that these vessels were used to store foodstuffs (such as seeds or flour, for example) or liquids.
Surface:
All sherd surfaces are slightly eroded, lumpy and rough, with minimal evidence for surface smoothing. This "lumpiness" appears to be the result of drawing techniques used in the vessel production process which was never properly smoothed over. One sherd demonstrates fingertip impressions on the interior surface where the rim was smoothed onto the vessel shoulder.
Decoration:
Horizontal bands of alternating linear incision and punctate or linear "slashes". One diagnostic feature of this variety is the pulling or displacement of clay into raised nodules which "interrupt" the decorative banding at the exterior vessel shoulder. These raised nodules are decorated with vertical and oblique linear incisions which appear to emit from centrally located punctation marks. In two instances the linear incisions fan downward toward the vessel body in a "hanging-palm-frond" or "cat whisker" design. On the third example, the oblique linear incising creates a set of nested chevrons pointing toward the rim of the vessel. Alternatively, these nested chevrons might be interpreted as having the appearance of a mountain.
Associated Modes:
Undetermined.

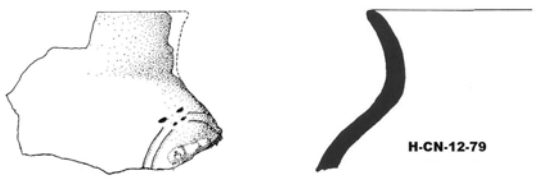


Figure 4.17. Taujica Incised Punctate: Taujica.

Ceramic Modes

Here I present an overview of important appendage modes from the Río Claro collection. These represent the most prevalent appendage modes from the site and, in some cases, the broader region. There is a heavy focus on human and animal imagery in both support and handle classifications. Several appendages from the original collection are not included in the following descriptions because they are either, a) single instances of a particular appendage form/design or, b) the appendage surface is so heavily eroded that identification is difficult, if not impossible. Table 4.2 provides a brief overview of the ceramic modes discussed below. In instances where modes have previously assigned classificatory names original designations are retained. However, new mode designations are typically assigned non-standard, or names of convenience (i.e., "whiskered man" or "flaring nostril"). These are identified by quotes denoting these descriptive names of convenience.

Río Claro Ceramic Modes

Supports
- *S1: Hollow Hemispherical*
- *S2: Pump Heel*
- *S3: Slotted*
- *S4: Splayed Foot*
- *S5: Stylized Human Head*
- *S6: Vertical Groove*
- *S7: "Whiskered Man"*

Handles/Lugs/*Adornos*
- *H1: Elaborate Appliqué Incised Strap Handle*
- *H2: Elaborate Appliqué "Loop" Handle*
- *H3: Expedient D-Shaped Strap Handle*
- *H4 :El Rey Lug*
- *H5: Rider Lug*
- *H6:"Flaring Nostril" Adorno*
- *H7: Serpent Head Adorno*
- *H8: Tool/Finger Impressed Fillet*

Table 4.2. Río Claro ceramic modes.

Supports

S1: HOLLOW HEMISPHERICAL
Identifying Attributes:
(n = 12) As the name implies, these supports are hollow hemispherical supports, typically with a large lateral perforation through the appendage. In fact, these lateral perforations are often so large that the appendage appears as a slab (or tab) support when viewed head-on. Larger versions of this support mode are generally rough and plain, or well-slipped. Smaller versions are often decorated with fine, perforated abstract designs or, what appear to be, human faces. These are also associated with unique, "dimple-based" vessel forms. Two examples have "rattle balls" (round ceramic pellets) inside.
Paste:
Amphibolite and Feldspar petrofabrics are present in equal amounts.
Associated Type/Variety:
Undetermined.

Figure 4.18. Exterior portion of a broken Hollow Hemispherical support.

S2: PUMP HEEL
Identifying Attributes:
(n = 6) The Pump Heel support is so-named because it looks like the pump heel from a woman's dress shoe. This mode tends to be a squat and directly tapered support with deep incised grooves and gouges on the exterior, as well as a round nubbin tip with a central depression at the end. The form of the support is highly standardized, with minimum variation in surface design. These supports average 3.9 cm in height.
Paste:
All Pump Heel supports exhibit Feldspar petrofabric.
Associated Type/Variety:
Undetermined.

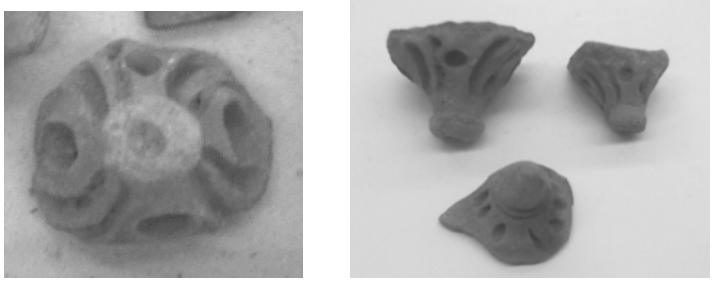


Figure 4.19. Pump Heel supports.

S3: SLOTTED
Identifying Attributes:
(n = 9) The Slotted support mode is represented by long, tapering, hollow supports with single or multiple elongated vertical slots intermittently located around the circumference of the support. These diagnostic, elongated slots are often associated with appliqué and incised surface decoration and modelled and stylized anthropomorphic figures at the distal end of the support.
Paste:
Amphibolite and Feldspar petrofabrics are present.
Associated Type/Variety:
Undetermined.

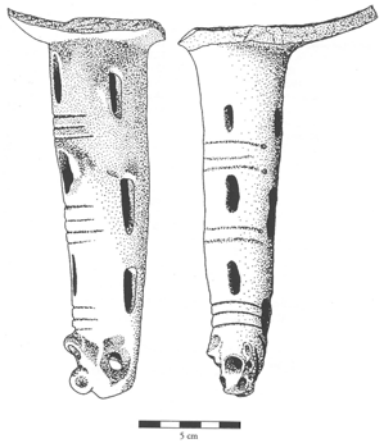


Figure 4.20. Slotted supports (after Healy 1993).

S4: SPLAYED FOOT
Identifying Attributes:
(n = 4) Tapering, hollow supports exhibit diagnostic "splayed" distal support ends. Many instances demonstrate what appear to be "flaring-nostril" appliqué decorations at the exterior proximal end of the support. All examples show a large, lateral perforation through the support.
Paste:
All examples exhibit a Feldspar petrofabric.
Associated Type/Variety:
Undetermined.

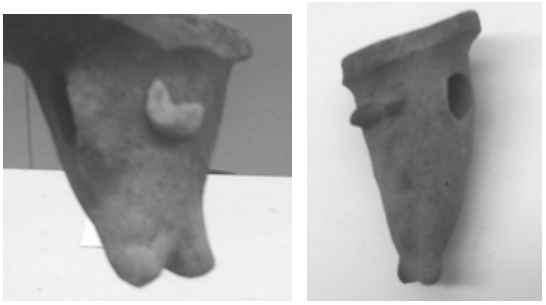


Figure 4.21. Splayed Foot supports.

S5: STYLIZED HUMAN HEAD

Identifying Attributes:

(n = 4) This modal category covers a range of hollow support styles, including bulbous, conical, and ovoid forms. The characteristic element of this support mode is the stylized representation of what appears to be a human face, often identified by its appliqué "nose". There are several examples of "human head" supports with facial hair. However, they will not be discussed here as they are unique and distinctive enough to warrant their own modal category.

Paste:

Amphibolite and Feldspar petrofabrics are present.

Associated Type/Variety:

Durango Cross-Hatched Incised Punctate: Durango.

Figure 4.22. Stylized Human Head supports.

S6: VERTICAL GROOVE

Identifying Attributes:

(n = 14) The Vertical Groove support is characterized by a deep central vertical incision, or groove, running almost the entire length of the support. Supports with this mode are typically solid and conical. However, this mode is also, though more rarely, seen on hollow supports. In most instances there is a highly stylized, abstract face at the top of the support which crowns the vertical groove. Quite often, a second prominent feature is a wide, protruding and/or flaring appliqué "nose" and bored "eye" on each side of the support that may extend as a hole through the support. It is perhaps the most common form of support from the site of Río Claro.

Paste:

All but one Vertical Groove support have Feldspar petrofabrics.

Associated Type/Variety:

Capiro Monochrome Incensario: Calentura; Dorina Abstract Incised Punctate: Castilla.

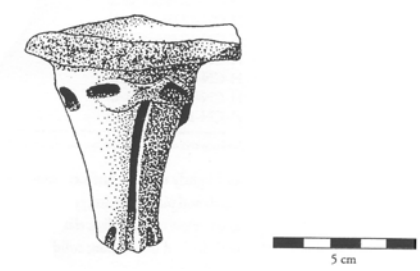


Figure 4.23. Vertical Groove support.

S7: "WHISKERED MAN"
Identifying Attributes:
(n = 9) This mode occurs on hollow ovoid and conical effigy supports which are adorned with what might be described as images of a "whiskered man". The image is seen with a full, flowing "beard", a "beard" and "moustache", or feline-like "whiskers". The images with "whiskers" alone may represent some sort of face painting technique.
Paste:
Amphibolite and Feldspar petrofabrics are present.
Associated Type/Variety:
Undetermined.

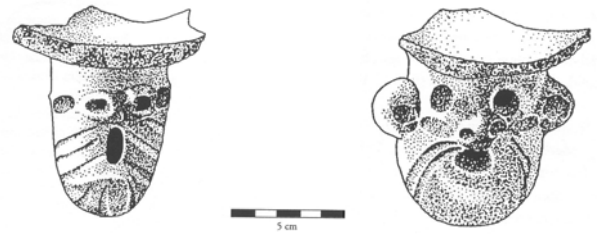


Figure 4.24. "Whiskered Man" supports.

Handles/Lugs/*Adornos*

H1: ELABORATE APPLIQUÉ INCISED STRAP HANDLE
Identifying Attributes:
(n = 8) This mode is characterized by elaborate, stylized zoomorphic, anthromorphic and/or decorative appliqué applied to a slipped and relatively thick, vertical, strap handle. The appliqué decoration is generally accompanied by linear incising and, in many cases, punctate design. These handles are generally quite large and thick, reaching 13.5 cm in length, 10.2 cm in width, and 1.4 cm in thickness.
Paste:
All examples exhibit Feldspar petrofabric.
Associated Type/Variety:
Dorina Abstract Incised Punctate: Dorina; Dorina Abstract Incised Punctate: Arena.

Figure 4.25. Elaborate Appliqué Incised strap handles.

H2: ELABORATE APPLIQUÉ “LOOP” HANDLE

Identifying Attributes:

(n = 7) This mode includes real loop handles, as well as D-shaped strap handles that have been modelled to achieve the “look” of a loop handle. I assume the modified strap handle would be more functionally effective and less prone to dislocation. In each case, “loop” handles are decorated with modelled, appliqué pellets of varying sizes. The pellets are often accented or defined with punctation marks. Less elaborate designs appear simply decorative (Figure 4.26, right), while more elaborate designs invite interpretation (Figure 4.26, left). However, it is uncertain what these images are meant to represent in many cases.

Paste:

All examples, save one, exhibit Feldspar petrofabric.

Associated Type/Variety:

Dorina Abstract Incised Punctate: Dorina (see Figure 4.7, top); Salamá Plain: Salamá.

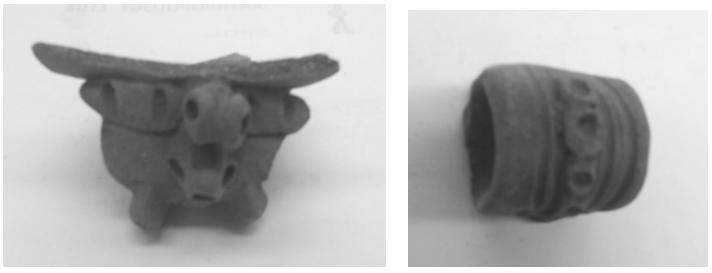


Figure 4.26. Elaborate Appliqué "Loop" handles.

H3: EXPEDIENT D-SHAPED STRAP HANDLE

Identifying Attributes:

(n = 7) This mode is characterized by simple, undecorated, and often crudely produced D-shaped strap handles. In some cases the edges of the handle are flat, and in other cases the edges flare outward (see Figure 4.26). Several examples give the impression that the handle would appear to be sagging on the side of the vessel.

Paste:

Amphibolite and Feldspar petrofabrics are present. Most examples are of an extremely coarse ware.

Associated Type/Variety:

Salamá Plain: Salamá.

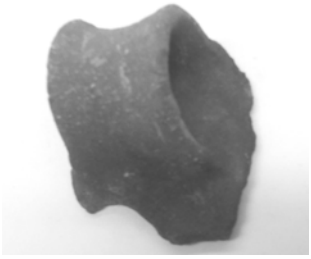


Figure 4.27. Expedient D-Shaped strap handle.

H4: EL REY LUG

Identifying Attributes:

(n = 8) The term El Rey, or "The King", was coined by Doris Stone (1941:33) after the name given to it by local inhabitants around the site of Peroles Calientes along the Río Negro. Strong (1935: 88) calls this mode "nose tilted". Stone suggests this commonly occurring mode can be identified by "the sharp aquiline nose, with distended nostrils" (Stone, 1941: 33). Other important diagnostic features are the open "mouth", and a "horn", or long protrusion, which often occurs above the "nose". The positioning of these lugs on a vessel suggests that the "face" is meant to be viewed in profile. In this case, the El Rey lug appears to be strictly decorative in nature, although in several instances the large hole which represents the "eye" might also serve as a receptacle for a stick or rope used to hoist or lift the vessel. This remains to be verified.

Paste:

Predominantly Feldspar petrofabric, with a single example of Amphibolite, present.

Associated Type/Variety:

Undetermined.

Figure 4.28. El Rey lugs.

H5: RIDER LUG

Identifying Attributes:

(n = 10) This mode is typically seen as a zoomorphic head, with either direct or slightly undulating arms gripping, holding onto, or "riding" astride a thick bulbous or tubular lug. This lug can be either hollow or solid in form and is typically known from monochrome vessels. The term "Rider Lug" is adapted from Strong (1935) who coined the term "appliqué rider" to describe this mode. Stone (1941: 35) interprets the rider as having rather human or simian facial aspects, suggesting perhaps that these are representations of monkeys or even monkey gods. Personally, I interpret them as having a frog- or turtle-like look to the rider's head, despite the associated arms. The lug typically has a slit or puncture holes running along the length of the appendage beneath the rider. Some also seem to have a large, lateral perforation through the lug.

Paste:

Both Amphibolite and Feldspar petrofabric types are present.

Associated Type/Variety:

Undetermined.

Figure 4.29. Rider lugs.

H6: "FLARING-NOSTRIL" *ADORNO*
Identifying Attributes:
(n = 8) I am unclear on what this *adorno* represents; some appear to be like "flaring nostrils" from other modes (i.e., Vertical Groove support modes) and others are quite abstract. In each instance an elongated pellet of clay is attached horizontally to the vessel and is decorated with two large parallel punctation holes which form the nostrils of the "nose".
Paste:
Both Amphibolite and Feldspar petrofabric types are present.
Associated Type/Variety:
Dorina Abstract Incised Punctate: Castilla (see Figures 4.10, 4.23, and 4.24).

H7: SERPENT HEAD *ADORNO*
Identifying Attributes:
The basic, "major" serpent form (n = 3) is quite standardized with a raised ridge, or serrated "eye-brow" and extremely diagnostic "tongue" extending from the mouth and looping around to attach at the "nose". All Serpent Head examples from Río Claro have a donut-shaped appliqué nose that may be unique to the site. It is also seen, in a "minor" form (n = 12), as small stylized *adornos* often attached at the rim or lip of small bowls and decorating the terminal, or distal end of tubular handles and supports. The term "Serpent Head" is adapted from Begley's (1999: 140) "serpent lug". I have elaborated on the definition as I feel his descriptor was too limiting. The Río Claro collection boasts several unique forms of small *adornos* similar to this one. They often represent stylized, long-snouted mammals, rodents, or birds. However, the Minor Serpent Head image appears to be the only standardized form of this *adorno* (see Figure 4.30, centre).
Paste:
Both Amphibolite and Feldspar petrofabrics are present.
Associated Type/Variety:
Capiro Monochrome Incensario: Capiro; Dorina Abstract Incised Punctate: Dorina; Durango Cross-Hatch Incised Punctate: Durango; Durango Cross-Hatch Incised Punctate: Undetermined.

Figure 4.30. Serpent Head *Adornos*.

H8: TOOL/FINGER IMPRESSED FILLET

Identifying Attributes:

(n = 7) A small strip of appliqué fillet is typically applied to the vessel (plates, dishes and shallow bowls) exterior, a short distance below the rim, and impressed (or punctation marks are made) with tools, or fingertips, to create ornamental, or "faux" handles.

Paste:

Both Amphibolite and Feldspar petrofabric types are present, examples of Amphibolite petrofabric predominate.

Associated Type/Variety:

Salamá Plain: La Brea (see Figure 4.15).

CHAPTER 5
EXAMINATION AND INTRPRETATION OF EXTERNAL CONNECTIONS

Overview of the Isthmo-Colombian Area

The isthmian landmass that lies between Mesoamerica and Andean South America has been given many different labels by scholars. Initial names were geographically oriented (i.e., Central America), while later definitions and labels became more culturally oriented (i.e., the Intermediate Area). Gordon Willey (1959) made the first real attempt to define southern Central America and northern South America in cultural terms, introducing and defining the "Intermediate Area" concept at the 33rd annual meeting of the International Congress of Americanists. At that time, his argument for a unique "Intermediate Area" was based on what the area seemed to be *lacking* in Precolumbian times – notably a focus on maize agriculture, "universal idea systems", and "great, coherent styles" like those known from Mesoamerica and the Andes (Willey 1959:190).

Despite this early attempt by Willey to define a unique culture area, most researchers continued to discuss the isthmus in geographical terms well into the 1970s and beyond (Hoopes 2005:5). However, the geopolitical label "Central America" continued to be a difficult one to work with because it included portions of the Mesoamerican culture area and excluded important cultural groups and areas of northern South America (Sheets 1992:17). In the 1980s, as a result of this difficulty, the geographical term "Lower Central America" emerged as the primary identifier, among archaeologists, to describe and define the isthmus which lay between Mesoamerica and Andean South America. Lange and Stone's (1984) volume *The Archaeology of Lower*

Central America served to crystallize the acceptance of this label. However, in the final line of his closing synthesis of this edited volume, Willey (1984:378) employs the term "Intermediate Area" while discussing cultural complexity and regional diversity apparent in Lower Central American archaeology.

Into the late 1980s and early 1990s, the term Intermediate Area finally gained favour among Lower Central American archaeologists. This is evinced in Lange's (1992) next major contribution to isthmian archaeology; an edited volume entitled *Wealth and Hierarchy in the Intermediate Area*. In this, the cultural and geographical limits of the Intermediate Area were succinctly defined as comprising eastern Honduras, Nicaragua, Costa Rica, Panama, northern Ecuador, portions of northern Colombia, and western Venezuela (Lange 1992b:2-3).

However, at the same time the term Intermediate Area was being more widely used, some researchers began to argue that the label was a misnomer which carried some negative connotations. It has been suggested that this label characterizes the region as backward and marginal to "higher" civilizations to the north and south (Hoopes 2005: 5; Sheets 1992:16; Willey 1984:342). Although state-level organization (like that of Nuclear America) was never realized in Precolumbian times, culture groups of Lower Central America *did* develop complex social systems. The arguments against the identifier "Intermediate Area" suggest that these groups, rather than being backward or marginal, followed different developmental trajectories with unique religious (animism) and socio-economic institutions, interests, and ideologies. It may be that an avoidance of state-level society maintained long-term cultural stability, which is now seen as a hallmark of the entire Precolumbian isthmian area (Hoopes 2005:2; Lange 1992b:3; Sheets 1992:18).

In summary, how archaeologists understand and define the Intermediate Area in cultural terms has changed, in some cases dramatically, over the past four decades. Less than two decades ago researchers were struggling with the basic question of whether or not the Intermediate Area could be conceived of as a "culture-area-with-time-depth" (Lange 1992a: xii). In retrospect, it is noteworthy how just a handful of dedicated archaeologists have shed so much light on the cultural intricacies of such a vast and complex area.

Recent research has resulted in yet another proposed redefinition of the Intermediate Area. Hoopes and Fonseca (2003:52-55; Hoopes 2005:3,10) have forwarded the concept of an "Isthmo-Colombian Area", defined as the geographic zone extending southward from northeast Honduras to northern Colombia and western Venezuela (see Figure 5.1). This definition is based on several inter-related elements that support an argument for this culturally unique and expansive culture area. The first two fundamental aspects are: 1) shared genetic traits, and 2) shared linguistic traits, with all groups in the area speaking various derivative forms of a broader Chibchan language family. These arguments are supported by other aspects which include archaeological evidence for a long-term and stable continuous occupation, leading back several millennia in some areas, and evidence for strong material culture affinities among Precolumbian groups of the lower isthmus (Healy and Dennett 2006; Hoopes 2005:14; Hoopes and Fonseca 2003:50; Quilter 2003:2). Cooke (2005:161) also suggests that a general consensus exists among researchers in the Isthmo-Colombian Area that historical and Precolumbian Chibchan-speaking groups of the isthmus were (and are) more closely related to one another than to outside cultures, and that these groups likely descended

from local Precolumbian isthmian populations (reaching back over 11,000 years in Costa Rica and Panama). This is in contrast to earlier suggestions of long distance migrations from Mesoamerican or Andean culture areas to explain cultural evolution. Hoopes and Fonseca (2003:52) suggest that all of these connecting factors coalesce within shared worldviews to create a "diffuse unity" in this culture area.

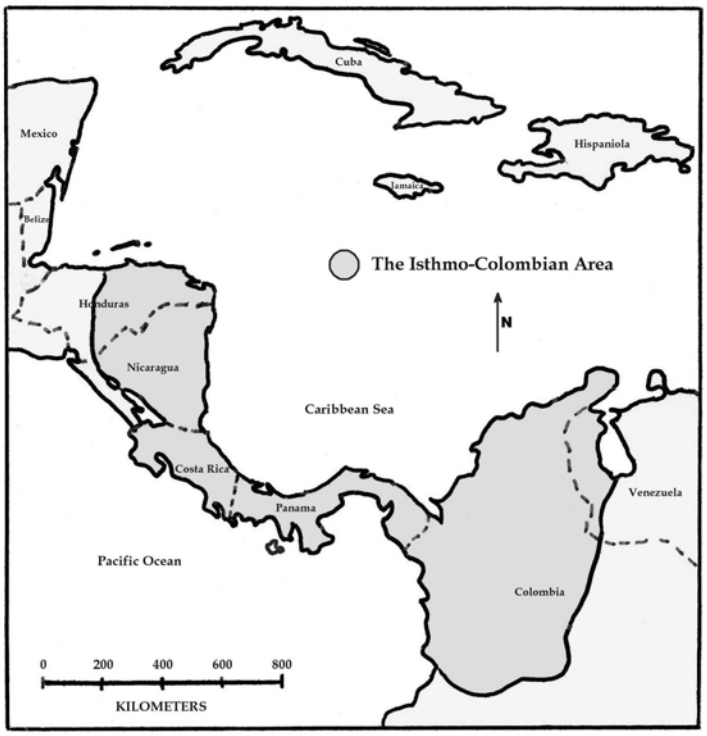


Figure 5.1. Map of the Isthmo-Colombian Area (after Hoopes 2005:4).

The inherent improvement of the concept of an Isthmo-Colombian Area over that of the Intermediate Area is that this territory is no longer framed in regard to its relationship with either Mesoamerica or Andean South America (Hoopes and Fonseca 2003:51; Quilter 2003:4). Instead, it is viewed as a viable culture area worthy of study in its own right (Hoopes and Fonseca 2003:50). The remaining sections of this thesis introduce new, interpretive models designed to test and evaluate evidence for the relationship between the northeast Honduras region and its more southerly neighbours.

Northeast Honduras has been classified as the northern frontier of the Area with inadequate evaluation of the claims (Healy 1984b; Healy and Dennett 2006). Thus, an important goal of this analysis is to determine whether or not northeast Honduras, in the Cocal Period, was a frontier, or part of, the Isthmo-Colombian Area, or an independent, autonomous region. Evaluation of the data is designed also to elicit new research questions with regard to Precolumbian northeast Honduras, and renew interest in research focusing on this important region.

Interpretive Models

Early models aimed at interpreting Precolumbian cultures and cultural change in what we are calling the Isthmo-Colombian Area were largely diffusionist (Johnson 1940; Lothrop 1939; Mason 1940; Stone 1963, 1972). In the 1970s, the dominant view was that cultural change among extant groups of the isthmus was the direct result of external influence from Mesoamerica, South America, or a mix of the two. Merchants were often argued to be the carriers of cultural traits and the main mechanism for cultural diffusion (Sheets 1992:18). Into the 1980s, more sophisticated models were borrowed by archaeologists from other geographical regions, but typically had to be stretched (or even contorted) to accommodate emerging data from the isthmus. These included interaction sphere models, buffer zone models, and “World Systems” models, which were employed in an effort to explain cultural change on the isthmus, yet none managed (in practice) to get beyond the basic overarching diffusionist orientation (Sheets 1992:19-20). The resulting effects of these new directions in theoretical orientation, however, were not without some positive aspects. Accompanying these “newer” approaches was an increased emphasis on distinct regional patterns of cultural development as opposed to

earlier, more generalized patterns meant to provide blanket explanations for the entire area (Hoopes 1992:70-71; Willey 1959).

As of late, evolutionist models have become popular tools for the interpretation of Precolumbian cultural development that includes episodes of both stability and change (Marcus 1998; Willey 1962, 1991, 1999). Hoopes (1992) was one of the first Lower Central American archaeologists to deal explicitly with theories regarding autochthonous (*in situ*), diachronic cultural development on the isthmus. These evolutionist models are most recently fueled by a serious reassessment of the geographical origins of Chibchan-speaking peoples.

Traditional models not only tended towards the assumption that cultural innovation was diffused into a passive, and receptive, Isthmo-Colombian Area from external sources, but that the original peopling of the region was also the result of in-migrations. The first sedentary populations identified in the Isthmo-Colombian Area were typically attributed to southward migrations of the Maya, while major regional developments occurring on the isthmus sometime around A.D. 500, especially local developments in gold working, have been argued by many to be the result of the northward migrations of Chibchan-speaking groups from continental Colombia (Cooke 2005:132-133). In fact, this approach to understanding the peopling of, and cultural change within, the isthmus is still espoused today by some (i.e., Cuddy 2007:35).

New interdisciplinary collaboration has yielded significant insights into Precolumbian developments on the isthmus across time. Archaeologists, linguists, paleoecologists, and geneticists (in many cases using the direct historic approach) have all made contributions to the most recent model of a Precolumbian cultural continuum

with significant time depth in some regions of the Isthmo-Colombian Area (Cooke 2005:133; Hoopes 2005:14). These new models imply an indigenous, *in situ*, "evolution" of regionalized cultural trajectories. Recent linguistic and genetic studies have provided, perhaps, the most revolutionary thrust of this shifting conceptual framework. These studies suggest that Chibchan-speaking peoples derive not from a Colombian (South American) homeland but, rather, a Costa Rican and Panamanian homeland, as the Chibchan "core" (Hoopes and Fonseca 2003:60-61). This hypothesis suggests that rather than being a consummate donor - northern Colombia was actually a recipient of Chibchan language, culture and, potentially, people (Hoopes 2005:12). This new approach invites us to view the Isthmo-Colombian Area from a fresh perspective. However, it also requires a reworking of assumptions previously held for all of the regions concerned. This most recent conceptual framework, based on an understanding and recognition of Precolumbian Costa Rica and western Panama as the Isthmo-Colombian Chibchan-speaking homeland, provides the footing for my own interpretive model for the late prehistory of northeast Honduras.

Researchers are currently building more complex models for the entire Isthmo-Colombian Area, as well as generating models for specific regions within the broader area. So far, not surprisingly, these models tend to focus on better documented archaeological regions of Costa Rica and Panama (Cooke 2005:161). To date there are no models that deal specifically with the relationship between northeast Honduras and other regions of the Isthmo-Colombian Area (Healy and Dennett 2006). As such, there is a clear need to create and assess models for interpreting Precolumbian connections between northeast Honduras and the rest of the Isthmo-Colombian Area. These models

should also be useful for testing the plausibility of connections between northeast Honduras and Mesoamerica as well.

Northeast Honduras as Frontier or Independent Region?: Models and Evidence

The overarching objective of this research is to assess the nature of the relationship between northeast Honduras and the Isthmo-Colombian Area in Period VI (A.D. 1000-1530). Accordingly, comparative interpretive models were required for such an assessment. Here I establish two competing models to describe the region: one based on a possible frontier association with the Isthmo-Colombian Area, and the other based on the evolution of an entirely independent, or autonomous, region. Recently, Cuddy (2007) has published a monograph wherein he argues that northeast Honduras represents an independent culture area. I will assess the model he presents through a comparative analysis with a frontier model to determine which model is best supported by the evidence available.

For the purposes of this thesis, I define an "Independent Region" as a politically autonomous population occupying a definable geographic area with a unique material culture repertoire and independent (unaffiliated) socio-cultural historical developmental trajectory. A frontier, on the other hand, I define as populations residing at the geographical extent (or hinterland beyond the "core") of a culture area whose physical boundaries fluctuate both spatially and temporally. As a frontier expands or retracts, identifiable change will occur in the archaeological record as these groups intermingle with frontier groups of other culture areas. Regardless of physical fluctuations, cultural affinities with the "core" will reflect the frontier region's continued association.

To explore the relationship between northeast Honduras and the Isthmo-Colombian Area I examine various lines of evidence for "connections". This choice seemed logical in light of the alternative option – the search for "differences". To test these competing models, I have chosen to analyze several features, especially material culture, as markers of cultural traditions and affinity. A thorough analysis of broad ranging material culture, and language, ought to provide useful insights to affiliations, or lack thereof, between northeast Honduras and the Isthmo-Colombian Area. The Independent Region model requires that there be a distinct social and ideo-cultural disconnect in material culture remains, with little or no similarities to adjacent regions and cultures. The Frontier model, on the other hand, requires that the archaeological record demonstrate distinct material culture similarities between the frontier region (northeast Honduras) and the homeland (Chibchan-speaking "core").

Exploring Inter-Regional Cultural Connections in the Isthmo-Colombian Area

I preface this section with a brief discussion of regionalization in the Isthmo-Colombian Area in antiquity. An understanding of the socio-political mechanisms operating within the greater Chibchan-speaking area is necessary to evaluate the archaeological evidence. One of the greatest difficulties in defining the geo-cultural and socio-political fabric of Precolumbian Lower Central American societies has been the intense regional diversity in the isthmian past. Although not the first to remark on the role of regionalization in Lower Central America, Willey (1984:343) was the first to acknowledge explicitly this apparent intercultural cleavage as merely a veneer covering deeper, long-standing cultural affiliations and material culture traditions. He noted that

regionalization, and rapid cultural development (including associated increasing social complexity), may have been the result of population growth and the conscious attempt to promote ethnic and political identity in a time of increasing intergroup competition (Willey 1984:363).

In defining an inclusive Isthmo-Colombian Area, and examining the possible role of northeast Honduras within that sphere, much of the task that lies before archaeologists working in this vast territory is to try to identify, define, and weigh the similarity within the difference. To do this, I examine linguistics, architecture and settlement planning, mortuary customs, subsistence, carved and ground stone traditions and, most importantly, ceramics. Such an examination of broader patterns should elucidate underlying currents of shared ideology and help to identify any "unifying cultural traditions". Of course, there are a plethora of available lines of evidence that could be discussed. I have chosen a select group of categories that can provide clues to cultural linkages (or not). I conclude the chapter by evaluating the interpretive models introduced in the previous section. Figure 5.2 presents a map of important archaeological regions and subareas of the Isthmo-Colombian Area that are discussed in the remainder of this chapter. I have compiled information about the regions and subareas contained from a variety of discrete sources.

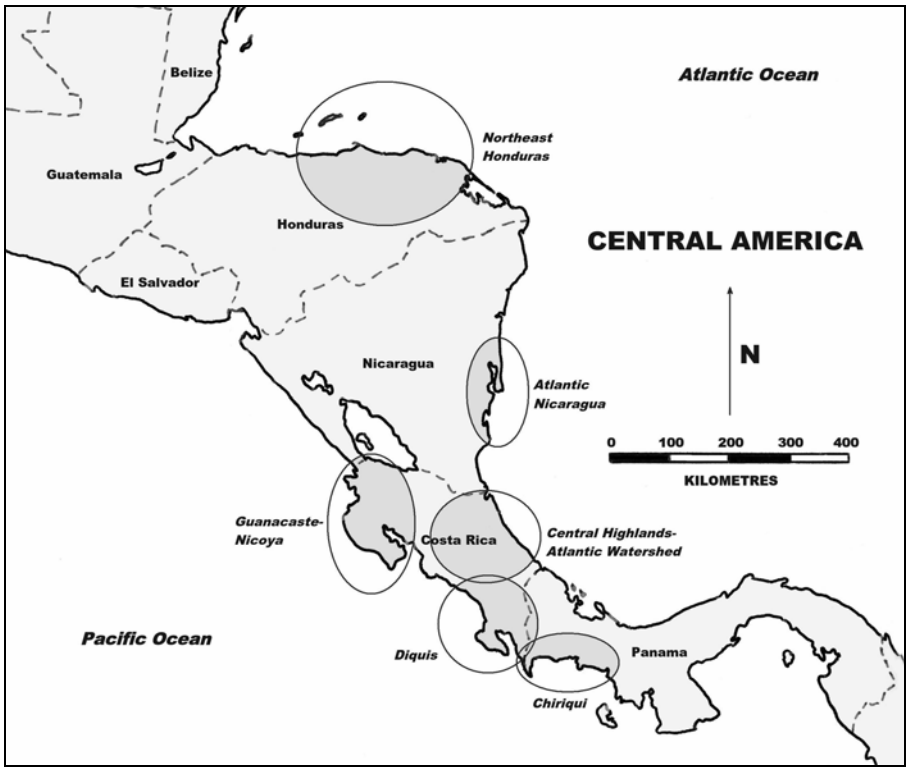


Figure 5.2. Archaeological regions and subareas of the Isthmo-Colombian Area discussed in the thesis.

Language

Chibchan-speaking populations are known to have inhabited a large part of the Lower Central American isthmus at Contact, with some groups speaking regional Chibchan dialects from northeast Honduras in the north to northern Colombia in the south (Hoopes 2005:11-12). Linguists suggest that the Pech (Paya-speakers) were the first to fission from the "core" area of proto-Chibchan speaking groups on the isthmus, sometime around the 4th or 3rd millennium B.C. (Constenla 1995; Hoopes and Fonseca 2003:60). Alternatively, based on glottochronological arguments, Constenla (1995; Corrales 2000:78) suggests a possible scenario in which the Pech actually represent the original proto-language family of Chibchan speakers from which migrations occur in a southerly direction. Migrants from northeast Honduras, in this view, would have initially

settled into an area stretching from southeastern Nicaragua to western Panama, where they thrived. However, Constenla (1995) acknowledges, and archaeological evidence supports, that the Pech of northeast Honduras are more likely the result of an early out-migration from the Chibchan "core", as opposed to being the point of proto-linguistic origin. Linguistics alone may never be able to solve this debate.

Discussion

The greatest fragmentation of Chibchan-speaking groups seems to coincide with the introduction of pottery, horticulture, and increased sedentism during the Early Ceramic, or Period III (4000-1000 B.C.) of the Intermediate Area chronology (Corrales 2000:3; Hoopes and Fonseca 2003:61). Based on this information, Corrales (2000:79) suggests that "...the circumscription of groups to specific territories related to incipient horticulture would have been a factor in the acquisition of a distinctive identity after internal fissions from a common ancestor." In retrospect, it may have been this shift in settlement patterning (i.e., dispersed, sedentary farming populations) that served as the impetus for intense regionalization we witness in the archaeological record of later time periods, rather than the socio-political competition previously suggested by Willey (1984:363).

Similar to the problems inherent in assuming a one to one correlation between material culture and ethnic identity, caution must also be taken when assuming a direct relationship between language, material culture, and identity. Archaeologists cannot rely solely on language data to infer these types of cultural affiliations. For example, Jordan and Shennan (2003) have demonstrated, through an analysis of diachronic change in basketry traditions among indigenous groups in California, that geographic proximity

between cultural groups can potentially have a greater influence on the composition of material culture assemblages than traditional linguistic affinities. In order to mitigate potential problems posed by assuming that linguistic affinities would have stronger normative influence than geographical proximity one must examine other, convergent avenues of evidence as I have done in the remainder of this chapter.

Architecture and Settlement Planning

Despite overtones of regionalization throughout the Isthmo-Colombian Area in Period VI, it should be possible to tease out shared ideology and even "unifying cultural traditions" through an examination of unique, identifiable settlement planning norms which manifest themselves in both architectural styles and construction techniques. I specifically use the term "settlement planning", instead of "settlement patterning", because we currently lack a sufficient amount of data to enable a proper evaluation of regional settlement patterns. It is impossible to analyze architecture and settlement planning of the *entire* Isthmo-Colombian Area, given the nature of this overview, so I have employed data from the far better studied regions. I have chosen to compare northeast Honduras, especially settlement planning and architecture from Río Claro, with external regions (specifically, subareas of Costa Rica) that provide some of the clearest examples of settlement planning and construction techniques of the Isthmo-Colombian Area.

In Chapter 2, I introduced the site of Río Claro. It consists of more than 50 elongated-rectangular, square, ovoid, and irregularly shaped earthen mounds, spread out in a northwest-southeast direction. The existence of flat flagstone pathways leading to

and from the site in different directions suggest that these may have served as specially designated entrance paths through what were once gateways, perhaps as part of a palisade complex surrounding the site. The layout of Río Claro indicates that these mounds were formally and densely organized around two larger, open areas (or plazas) with the central irregular-shaped mounds serving as the central axis. The majority of the mounds at Río Claro were faced with a substantial number of unworked cobblestones, which had been transported to the site from the base of the mountain range over 2 km from the site proper (Healy 1978b).

As illustrated in Figure 2.3, the predominant mound form is the elongated-rectangular type. Several of these low truncated mounds, averaging 1.2 m in height (although most are less than 100 cm in elevation), extend over 17 m in length (with the longest mound measuring 59 m) and exhibit hard-packed clay floors and unmortared cobble-faced ramps leading from the plaza area to the platform surface (Healy 1978b:17-19). These elongated-rectangular mounds are interpreted as being "longhouse" residential structures, and many have evidence of hearths (Healy 1984a:153). Many of these "longhouse" mounds exhibit a continuous, single course of cobblestones, marking foundations to what were presumably perishable superstructures atop the platforms. These cobblestone foundations are sometimes alternatively referred to as "house-rings". Despite the categorical "ring" descriptor, these "house-rings" are seen in various shapes, such as the rectangular forms at Río Claro.

Recent settlement investigations in the Culmi Valley, Department of Olancho, in interior northeast Honduras (Río Platano Project [PRP], Begley 1999), when coupled with the Río Claro data, provide what appear to constitute architectural "norms" for

Precolumbian northeast Honduras. These "norms" include: a) *site location and layout*, b) *"longhouse" or palenque mound* residential platforms, c) the use of *cobble facings* to adorn mound surfaces and associated approach ramps, d) the use of *cobblestone "house-rings"* to mark the foundations of perishable superstructures, and, e) the use of *cobble and flagstone pathways* to mark passage to and from the site, and even beyond immediate site limits.

Site Location and Layout

Like Río Claro, most of the Period VI sites (La Cooperativa, Marañones, PRP-16, PRP-49, and El Cafetal) in the Culmi Valley, in the interior of northeast Honduras, are located on the first terrace in the foothills above the alluvial valley floor (Begley 1999:192). Site planning in the Culmi Valley demonstrates a loose arrangement of mounds, ranging from 30 cm to 10 m in height, with mound size decreasing toward the periphery of the site. None of the planning at sites in the Culmi Valley appears as organized, or congested, as the site of Río Claro.

A shift in desirable site location is mimicked throughout other regions of the Isthmo-Colombian Area in Period VI. Snarskis (1981a:36) notes that during Period VI, in Atlantic and Highland Costa Rica, there seems to be increased variation in site location. However, in many instances sites begin to be constructed in the foothills of mountain ranges, as opposed to the alluvial valley and basin floors where sites were generally located throughout Period V. Similarly, site location in the Diquís subarea of southwest Costa Rica also appears to have shifted in Period VI, in many cases, from alluvial valley floors to the piedmont. On the Central Pacific coast between the Diquís subarea and the Guanacaste-Nicoya region, sites such as Pozo Azul and Lomas Entierros also

demonstrate a shift to settlement location along river terraces and hilltops in this late period. It has been suggested that this shift represents a strategic plan to improve defense, control of nearby rivers and, thus, control of access to the region from the coast (Corrales and Quintanilla 1996: 106-107).

In the Diquís subarea, part of the impetus behind this shift in site location may have originated in the desire to locate sites in closer proximity to large cobble concentrations for easy access to building materials (Drolet 1986:326). This brief review suggests a generalized shift in settlement planning and layout throughout northeast Honduras and other regions, especially those located in modern day Costa Rica, of the Isthmo-Colombian Area.

"Longhouse" and Palenque Mounds

Typical mound forms for the Culmi Valley include elongated-rectangular (described as large, linear long-house type structures) and square platforms. The majority of these platforms are interpreted as being residential mounds due to well-preserved hearths found in various occupational deposits within the mounds themselves (Begley 1999:206). The description of these Culmi mounds is highly reminiscent of the residential mound structures at Río Claro (Healy 1978b:17).

In the Atlantic Watershed and Central Highlands of Costa Rica, there appears to be some changes in mound shape occurring in Period VI. At several sites there is a visible shift from traditional quadrangular forms (as seen in northeast Honduras) to a mix of quadrangular, elliptical, and circular *palenque* forms (Snarskis 2003: 187). Guayabo de Turrialba, the largest and most complex Period VI site in the Central Highlands of Costa Rica, extends over 1 sq. km. There are more than 50 identified mounds at the site, with at

least 17 “longhouse” mounds. As in northeast Honduras, these structures are believed to have housed extended kin groups living in the central portion of the site (Snarskis 1978:242; 1992:157; Stone 1977:201). Period VI sites in the Central Pacific coast also have a mix of longhouse, circular and ovoid mound structures. Several of the longhouse mounds at the site of Pozo Azul extend over 50 m in length, a description highly reminiscent of longhouse-type mounds of northeast Honduras (Corrales and Quintanilla 1996: 107).

Cobble Facings

Small Period VI mounds in the Culmi Valley tend to be solely constructed of clay, while larger mounds are of packed clay and have cobblestones edging the exterior walls, once again recalling site planning at Río Claro (Begley 1999: 90, 208). It is appropriate to note the occurrence, among Period VI sites such as PRP-16, of a sunken plaza surrounded by a cobblestone wall, bordered by a few large mounds (Begley 1999: 208). This type of site planning appears to be rare in the region.

The site of La Cabaña, in the Atlantic Watershed of Costa Rica, is a highly nucleated village site comprising many circular mounds. The main structure at the site is 2.5 m in height, spans over 20 m in diameter, and has cobble-faced steps which lead to a central plaza outlined by cobble-faced ridges (Fonseca 1981:110). Description of this plaza, with its cobble-ridged outline, is reminiscent of the plaza described by Begley (1999) for the site of PRP-16 in the Culmi Valley of northeast Honduras. One smaller earthen mound at La Cabaña appears to have been approached via short, cobble-faced graduated steps, or perhaps a ramp (Fonseca 1981:110). Many of the mounded structures at Guayabo de Turrialba, in the Central highlands, were also approached via cobble-faced

steps, ramps or, in some cases, both. Of particular interest at Guayabo, is the existence of many complex flagstone-paved aqueducts (Snarskis 1992:157). On the Central Pacific coast of Costa Rica, many of the largest mounds at the sites of Pozo Azul, Jesús María, and Carara, are completely faced with river cobbles (Corrales and Quintanilla 1996:108-109).

Cobblestone "House-Rings"

The "house-ring" construction technique from Río Claro is also present on platform tops at Period VI Culmi Valley sites, and in some cases it appears as if the platforms have been completely paved in cobbles (Begley 1999: 208, 211). This type of foundation "ring" delimiting the edge of perishable superstructures is a highly diagnostic technique which presents the clearest picture of cultural affinities between northeast Honduras and other regions of the Isthmo-Colombian Area in Period VI.

In the Central Highlands of Costa Rica, the largest mound at the site of Barrial de Heredía is a quadrangular structure. Inside the initial "house-ring" atop this platform are cobble-lined room dividers and other cobble-outlined features. Snarskis (1984:157-158; 1992:153) has interpreted this, and other quadrangular mound structures, as being purely residential. The site of La Cabaña, in the Atlantic Watershed of Costa Rica, is a village site comprising many circular mounds. All of the mounded structures at this site are built of packed clay and have highly visible and clearly defined cobblestone "house-ring" foundations on top (Snarskis 1992:152). Also of interest at La Cabaña is the presence of "house rings" found on flat, non-mounded terrain (Snarskis 1984:158-159; 1992:152-154), a practice not yet identified in northeast Honduras. The site of Guayabo de Turrialba has ellipsoidal, rectangular, or irregular shaped mounds, also topped with

cobblestone “house-ring” foundations (Fonseca 1981:105). Similar to La Cabaña, Guayabo also had circular “house-rings” located directly on the ground surface.

The site of Najera, a multi-component site in the Reventazón River Valley in the Central Highlands of Costa Rica, is located on a hilltop beside a small tributary of the Reventazón River. The site extends over an area of three hectares (Kennedy 1968). The principal structure at Najera is an ovoid cobblestone ring, or cobble-ridged retaining wall, covering a truncated hilltop. Again, the description is similar to the cobble retaining walls at PRP-16, in the Culmi Valley of northeast Honduras (Begley 1999). Although Kennedy does not assign a function for this ridged-wall (Kennedy 1968:236), Snarskis (1992:156) suggests that it represents part of a plaza. At the base of the hill, and adjacent to a small stream running beside the site, is a cobblestone “house-ring” (24 m in diameter) flush to the ground. Almost 40 years ago, Kennedy (1968:238) noted an important association between features at Najera and almost identical cobblestone “house-rings” from the Costa Rican Highlands. Perhaps the most interesting find at Najera is a large circular structure built of cobblestones and clay, with multiple entrances. Cobblestone foundation “walls” reach approximately 1.2 m in height and 34 m in diameter, with only 20-50 cm of stone wall exposed inside the structure, suggesting that the interior had been mounded and packed to rise above the ground surface (Kennedy 1968:235-239). Cobblestone “house-rings” are also common architectural features at sites such as Carara, Pozo Azul, Jesús María, and Lomas Entierros, on the Central Pacific coast (Corrales and Quintanilla 1996:107-108).

There are also numerous cobblestone “house-ring” foundations at the site of Murcíelago in the Diquís subarea of southwest Costa Rica. These “house-rings” often

have mounded interior floors, and are reminiscent of the walled structure described for the Najera site in the Central Highlands of Costa Rica. Based on all the evidence for "house-ring" construction techniques, it seems apparent that there are strong ties between northeast Honduras and many regions of Precolumbian Costa Rica, the Chibchan "core".

Cobble and Flagstone Pathways

As at Río Claro, stone-paved pathways also occur at some sites in the Culmi Valley, with several cobblestone pathways being noted at the site of Marañones, for example. Begley (1999:213-214) notes that stone and cobble-paved paths are generally associated with larger sites, but are also found alone in areas removed from known site locales. In some cases, these pathways lead from sites to water sources, or *vice versa*.

At the site of La Cabaña, in the Atlantic Watershed of Costa Rica, directly across from the main mound is a cobble-paved pathway (or causeway) leading from the plaza. Similarly, the site of Guayabo de Turrialba is approached via a cobblestone pathway, and presumably a gated entrance. Two square mounds are situated on either side of the main entranceway, which is located over half of a kilometre from the centre of the site. This pathway, reminiscent of those at Río Claro, continues into the central portion of the site. Plazas and pathways inside the site boundaries are all paved with cobblestone. Exiting the site proper, cobblestone pathways lead to other, smaller sites, some many kilometres distant (Fonseca 1981:105; Snarskis 1992:156-157, 2003:185; Stone 1977:201). The site of Pozo Azul, on the Central Pacific coast boasts several pathways paved with river-rounded pebbles.

The site of Murcíelago, located in the Terraba River basin in the Diquís subarea of southwest Costa Rica, is comprised of approximately 60 large circular structures

(Drolet 1986:328-329; 1984:126). These mounds were typically 15-30 m in diameter and clustered around the site in groups of two or three, forming what might be called small residential or plaza groups. Cobblestone pathways were constructed to connect individual structures within each of these residential clusters, or plaza groups (Drolet 1986:328-329; 1984:126). As with all the other hallmarks I have discussed, northeast Honduras shares with several regions of Costa Rica the traditional use of cobble and stone-paved pathways to delineate the use of space within, and beyond, the site.

Discussion

Site planning and construction techniques throughout the Isthmo-Colombian Area are not identical to those in northeast Honduras and some of the regional differences have been discussed herein. However, there seem to be underlying normative forces which may be an indication of shared ideology in site location, and planning and construction techniques, throughout much of the Isthmo-Colombian Area. Snarskis (2003:185) forwards the concept of a regionalized "town plan" for many Precolumbian regions of Costa Rica. This is based, he suggests, on a widely disseminated, "...shared mental template for architecture and site organization". I agree, and further suggest that a conceptual Isthmo-Colombian Area "town plan" exists, with regional variation occurring mainly in the esthetic touches as opposed to the fundamental "norms" of the "town plan". These "norms", or hallmarks, include: the use of artificial clay mounds, often combined with cobblestone facing, ramps, and/or steps; linear cobblestone "house-rings" atop these earthen mounds, or on the ground surface; informal structural arrangement around a central open space (although it must be noted that this seems to be a pan-American phenomenon in Precolumbian times); the broad use of cobble and/or flat stone pathways

connecting structures within sites, between sites, and connecting sites to natural features such as water sources; and finally, perhaps the most outstanding feature in the regions discussed is the focus on circular *palenque* and elongated-rectangular "longhouse" residential structures. These hallmarks, collectively, are exclusive to the Isthmo-Colombian Area. We currently understand them to be *in situ* developments which cannot, and should not, be attributed to influences from either Andean South America or Mesoamerica. Although I have not discussed architecture for Nicaragua, Panama, or northern Colombia, these basic site planning and construction traditions reveal themselves, to differing degrees, in all other regions of the Isthmo-Colombian Area.

One serious problem in regard to the Precolumbian archaeology that lies between northeast Honduras and Costa Rica is our general lack of knowledge. Understanding settlement planning and construction techniques for this vast expanse (Atlantic and Highland Nicaragua) would surely help to complete the archaeological picture. The results of recent field work carried out along the Miskito coast of Nicaragua are still not fully accessible. However, these investigations indicate that by A.D. 350 local groups were constructing residential earthen mounds grouped loosely around open spaces (or plazas) and, in some cases, cobblestone facings occur on some of the larger mounds (Clemente and Gassiot 2003). Perhaps this region will, one day, demonstrate more clearly a transition between site planning styles in northeast Honduras and those of Costa Rica. Despite some differences, there are some striking similarities in site planning and construction techniques which allow us to tease out norms and traditions that underlie a thin veneer of intense regionalization.

Mortuary Customs

Like nearly all forms of archaeological evidence from the region, our current knowledge about mortuary customs in Precolumbian northeast Honduras is limited. However, based on this evidence, there are tantalizing hints of a common connection with several other regions of the Isthmo-Colombian Area. These common connections include a focus on independent cemeteries and burial mounds that appear to have been intentionally located away from the village or, less frequently, in a delimited locale inside the village boundaries. Cemetery-style mortuary customs that will be discussed here are quite unlike those typically associated with Mesoamerica or the Andes. In Mesoamerica cemeteries were rarely employed. Instead, the deceased were typically buried beneath house floors, within public structures, or beneath plazas (Blomster 2004: 147; Gillespie 2001: 92; Healy 2006, personal communication). These mortuary customs indicate an explicit desire to link the living with the dead, where structures became sepulchers and portals to the past and connections to the underworld (Kunen et al. 2002:198-199). In the Andes, mortuary customs were slightly different. In the eastern Andes, in Period VI, the deceased were commonly buried in *chullpas*. These are multistory stone buildings of various shapes, sometimes described as being a “family vault”. Other times the deceased were encased in a clay case and lined up along a cliff ledge, or placed in a small clay “house” built on a similar cliff ledge (Bruhns 1994:321-325). Cemeteries, subterranean tombs, and secondary urn burials are also known from the southern and coastal Andes (Bruhns 1994:311-313; Topic 2007, personal communication).

Although the practice of household burials is known from almost every region, and seems to have been practiced to some degree in Costa Rica in Period VI (Snarskis

2003:185), cemeteries were the main form of repository for the dead throughout the Isthmo-Colombian Area. Predominant forms of interment occurring in independent cemetery-style zones in various regions were urn and bundle burials, shaft and chamber burials, subterranean tomb burials, and artificial burial mounds. Into Period VI, almost all regions of the Isthmo-Colombian Area practiced at least two of these forms – typically a combination of burial mounds and subterranean interments within identifiable restricted zones set apart from the village. Similarly, most regions have evidence of both primary (extended and flexed) and secondary (bundle and urn) burial types (for example, see Bruhns 1994:345,348; Drolet 1984:257-262, 1992:229; Haberland 1984:246, 248-251; Sheets 1992: 33; Snarskis 1992:156).

Although evidence for mortuary customs in Precolumbian northeast Honduras is scant, some information can be gathered from varied and disparate sources. The following is a synthesis of available data. This picture will then be compared to known mortuary practices from other, better studied regions of the Isthmo-Colombian Area in order to evaluate similarities and/or connections.

Secondary Urn Burials

Strong (1935) was the first archaeologist to publish evidence of prehistoric human burials in northeast Honduras, reporting on discoveries in the Bay Islands in 1933. Although some of the information related by Strong was the result of his own excavations, much of it was the result of earlier excavations by Bird and the Boekelman Shell Heap Expedition of 1931 (Strong 1935:1, 20). Several skull and urn burials were discovered by both Bird and Strong at Black Rock Basin on the northwest shore of Utila Island. This is a narrow inland harbour that, according to Strong (1935:20), is littered

with a series of separate occupation and burial sites.

Site 1, at Black Rock Basin on Utila Island, consisted of eight secondary urn burials that were intrusive to the remains of a much older habitation site (Strong 1935:22). This cemetery is located approximately 100 m away from a contemporaneous habitation site further up the beach (Strong 1935:22-28), and is a good indication of late cemetery burial practices in northeast Honduras. Human long bone bundle burials and skulls were generally found in association with individual or grouped urn burials; all burials were surrounded by an intentionally placed layer of white beach sand prior to interment (see Strong 1935: Plate 2). Urns were large monochrome ollas and typically contained skeletal remains of all types, as well as “extra” skulls and teeth. The amount of skeletal remains generally indicated multiple, secondary burials within each urn.

Beyond those contained within the urn burials, 21 skulls with attached mandibles were also discovered. The individuals represented were of both sexes and ranged in age from early childhood through adulthood. In some cases the skulls were clustered together. All skulls were positioned to face south, many with femurs lain horizontally in front of the faces. In other cases, the skulls encircled a central urn burial and tended to face clockwise. Descriptions of accompanying ceramics suggest that these urn burials dated predominantly from late Period V (A.D. 800-1000) and early Period VI (A.D. 1000-1400) (i.e., San Antonio Carved and Dorina Abstract Incised Punctate type ceramics).

Secondary urn burials (interred in independent cemeteries) are also well known from regions of Panama and northern Colombia. In both central and eastern Panama, urn burials become a frequent occurrence in late Period V and Period VI (Cooke 1984:271). In northern Colombia, especially among the chiefdoms of the Río Magdalena, and in the

Darien region of eastern Panama, urn burials became the predominant burial practice after A.D. 900 (Bray 1984:335). The Muisca (or Chibcha) also used secondary urn burials in Period VI, but less extensively than other groups of the region (Bruhns 1994:348).

Artificial Burial Mounds

The 80-acre site, located inland on Utila Island, had refuse middens that also served as burial mounds. According to Strong (1935:34), these mounds contained both extended and flexed primary burials. Approximately two decades later, Ekholm and Kidder also conducted excavations at the 80-acre site, uncovering seven additional burials. These included extended and flexed primary, as well as secondary urn burials within the artificial mounds. The individuals represented an age range from infant to adult (Epstein 1957:24-33). Helbig (1956:30) also notes the use of shell middens as burial repositories by indigenous Pech groups of northeast Honduras.

In 1965, a private donation was made to the Smithsonian Institution that had been discovered some twenty years prior by Mr. R. H. Davis and Doris Stone (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, Accession #A448218). The contents of the donation were recovered from excavation trenches in what Stone described as a burial mound near Trujillo. Although there is no published record of these finds or their precise context, they do help provide a hint towards the use of artificial burial mounds in northeast Honduras.

The use of artificial mounds as burial repositories, both within residential areas and in independent cemetery areas, is not unique to northeast Honduras. Artificial burial mounds (often containing stone chambers) are known from the Diquís region of Costa

Rica, eastern Panama, and northern Colombia beginning in late Period V. The use of artificial burial mounds continued in these regions, and appears to have been adopted throughout the Chiriquí region of western and central Panama in Period VI.

In the Terraba Basin of the Diquís region artificial mounds in independent terraced zones were employed to house burials. Drolet (1984) suggests that this was a "high class" of cemetery zone that tended to be spatially restricted and associated with elaborate design and funerary accoutrements. In many cases, mounds contained hundreds of tombs that were marked with basalt columns, petroglyphs, or pecked granite spheres. These "higher class" cemeteries with mounds were typically located on elevated terraces overlooking the river, the residential area, and "lower class" cemeteries (Drolet 1984:261), which will be discussed below.

In central Panama, throughout Period VI, artificial burial mounds were the predominant practice at cemetery sites such as Sitio Conte and El Hatillo. Sitio Conte showed evidence of basalt columns and ceremonial altars as grave and mound markers (Cooke 2005:159; Stone 1972). Artificial burial mounds in independent cemetery zones are well known from northern Colombia during Period VI. However, they appear to have received their greatest use during Period V, with the use of urn cemeteries predominant in Period VI. The mounds of Colombia varied in size, with large mounds containing burials associated with high status grave goods, and smaller mounds with less substantial grave goods. Unlike other groups of northern Colombia, the Tairona appear to have relied heavily on artificial burial mounds in cemeteries throughout both Periods V and VI (Bray 1984:333, 335, 337).

Hilltop Cemeteries

Helbig (1956:30) suggests that Precolumbian Pech cemeteries are also known from hilltop sites and that these cemeteries tended to be associated with (then) frequently reused offertory areas. According to local informants, whom Helbig suggested were knowledgeable about local Precolumbian traditions, indigenous Pech groups had a preference for locating cemeteries on hilltops or on terraces overlooking a river. In either case, the cemetery tended to be located a "small distance" away from a known occupation site. Archaeological evidence supporting the idea of hilltop cemeteries in northeast Honduras does exist. Strong (1935) discusses two potential hilltop cemetery sites: the Dixon site, Roatán Island and the Indian Hill site, Barburata Island.

The Dixon site is located at the highest point (250 m asl) of an east-west ridge that serves as the "backbone" of Roatán. From this ridge top one can see the entire northern and southern extents of the island, and facing south there is an expansive view of the mainland. The Dixon site sits atop a protruding "knob" of earth about 13 m wide and 30 m long from east to west, and is elevated 7-10 m above the rest of the ridge (Strong 1935:51). The central portion of the elevation was covered by a circular artifact deposit approximately 12 m in diameter. According to Strong, when facing north to the Caribbean sea and standing at the central interment - about 3 m to the very left (NW) was a concentration of incised vessels, many of which were miniature; to the very right (NE) was a concentration of metate fragments, figurines and flaked stone knives; and directly to the south of the central cache, facing the mainland was concentration of perforated conch shells (possibly trumpets).

There is no evidence of previous human habitation in the site vicinity, indicating

that the area was not residential (Strong 1935:52). However, preservation at the site was so poor that no human or animal remains survived in the record. Within the central interment was a bed of nested, broken sherds which extended to a depth of 60 cm below the surface. These sherds, up to 10 layers thick, were tightly packed and found to be protecting a votive cache within. This offering (or burial accompaniment) was composed of a distinctive, Period VI, Bay Island Polychrome vessel (Figure 5.3) filled with 487 objects including copper bells and jewelry; shell labrets, pendants and beads; carved stone figures and beads; carved greenstone (talc) pendants and ornaments; and a highly polished stone celt (Strong 1935:53).

Figure 5. 3. Bay Island Polychrome vessel from the Dixon Site, Roatán Island (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, catalogue #A373235).

Similarly, the Indian Hill site is located atop the tallest central hill ridge of Barburata Island (~100 m asl) and contains two components. The artifact deposits here are similar to those discussed for the Dixon site, but far more extensive. There was a massive number of sherds, as well as ceramic ocarinas, ceramic figurines, miniature ceramic vessels, mace heads, green talc ornaments, roller stamps, ground stone pestles,

metate fragments, and conch shells (Strong 1935:86-87, 111-112). Again, there was no evidence of occupation (i.e., hearths), indicating that the site was non-residential. Both adult and juvenile teeth were discovered, suggesting some form of interment originally took place at the site. However, there was no indication of whether these may have represented primary or secondary burials (Strong 1935:111).

Snarskis (2003:185) discusses offertory caches or burial accompaniments that appear to be strikingly similar to those just discussed for the Bay Islands, northeast Honduras. According to Snarskis, the Period VI site of La Cabaña had burials associated with caches containing ocarinas, figurines, and miniature pottery vessels. In two cases at the site, these votive offerings were contained within a larger tripod vessel that had large appliqué *adornos*, much like the cache at the Dixon site, Roatán. Other, smaller, solitary burials (with multiple individuals in each burial) that contain elaborate votive caches are known from the region in Period VI (Snarskis 2003:189). The similarities in burial accoutrements seem to provide support for the argument that the Dixon and Indian Hill sites represent cemeteries of northeast Honduras.

Although La Cabaña demonstrates an instance of a burial zone within a residential site, distinctly independent hilltop cemeteries are well known from sites in other regions of the Isthmo-Colombian Area in Period VI (Cooke 2005:159), most notably from the Diquís region of southwest Costa Rica. There are over 26 cemetery sites known from the Diquís region and, according to Drolet (1984:261), there are several well-defined classes of independent cemetery. In some cases, what he calls “multifeature cemeteries” occur where multiple, independent, and socially stratified cemetery zones are located in a single area on raised terraces overlooking river valleys and residential areas (Drolet 1984:260).

The “lowest class” of cemetery zone is the subterranean tomb burial marked by piles of river cobble and typically located on the first terrace above the residential area (Drolet 1984:260; 1992:232). One example of this type of cemetery occurs at the Rivas site (see Drolet 1992:224, Fig. 7) in the upper Terraba Basin of Costa Rica.

Primary Subterranean Burials

In 1991-1992, Begley (1999) excavated the Difficulty Hill site on Roatán Island. Extended burials were unearthed at the site, which Begley dates to Period VI due to their association with a copper bell. All of the individuals represented appeared to be adults. Several of the burials were located side by side, which suggests a cemetery (Begley 1999:179-180). Isolated individual burials dating to late Period V have also been found.

On the mainland, one individual burial was encountered at the Talgua Village site in the Department of Olancho (Begley 1999) and another at the Selin Farm site in the Department of Colon (Epstein 1957:45; Healy 1975). The Talgua burial is of particular interest due to the fact that it was found to be covered by a 30 cm thick layer of round, flat pebbles (Begley 1999:179). This method of marking the grave with a pile of rocks recalls subterranean burials in both the Atlantic Watershed (discussed below) and Diquís (discussed above) subregions of Costa Rica. Flexed and extended primary subterranean cemetery burials are known, in some degree, from almost every region of the Isthmo-Colombian Area.

The Atlantic Watershed and Central Highlands of Costa Rica are perhaps the most famous locales for their use of primary subterranean burials within independent cemeteries. Secondary burials within these same cemeteries are also common. These were typically housed in stone tombs for which they are so well known (Snarskis

1992:156). In fact, this practice is so diagnostic of the region that the Late Period in the regional chronology is known as the Stone Cist Period. One good example of burial practices from highland Costa Rica in early Period VI (ca. A.D. 1000) comes from the Rodríguez site. Here stone cist tombs were found stacked beneath the surface, one on another. Skeletal remains were laid out in anatomical position within the graves (Snarskis 1992:158-159). Stone (1963:181) suggests that similar stone-cist graves, although rare, also occur on the mainland of northeast Honduras. Unfortunately, she does not provide any details of, or references for, these types of burials.

In central Panama, at the site of Sitio Conte in late Period V, the more well-furnished graves were often subterranean primary burials of multiple individuals (typically males) with accompanying caches (Cooke 2005:160; Linares 1977:34). Into Period VI, however, subterranean burials appear to have gone out of fashion, being replaced by artificial mounds, but continued evidence for primary extended and flexed burials is well known from the El Hatillo site (Stone 1972). The Muisca of northern Colombia commonly employed both extended and flexed subterranean cemetery interments in Period VI. These have been found buried directly in the soil and in specially-built stone tombs (Bruhns 1994:345).

Ethnohistoric Evidence

Conzemius (1932) provides some interesting ethnographic and ethnohistoric information about the burial practices of native groups (Moskito and Sumu) from the Moskito coast of northeast Honduras. These groups would have been direct neighbours of the Precolumbian Pech. According to Conzemius (1932:155), shortly following the time of European contact, both the Moskito and Sumu wrapped the deceased's body in bark

cloth and deposited the corpse in a cemetery generally located a distance from the village. This was likely a continuation of Precolumbian burial practices. He also suggests that the Moskito practiced secondary burials. Here the wife would exhume her husband's remains a year after the initial burial, scrape the bones of any remaining tissue, and dry them in the sun. Following the drying process, she would carry the bones with her daily for another year before they were re-interred as a secondary burial (Conzemius, 1932: 156). Although limited in scope, this ethnohistoric evidence may help provide some insight into earlier burial practices of northeast Honduras.

Discussion

Healy (1978b:26) noted that "strikingly absent from H-CN-12 were any indication of burials or human skeletal remains". In retrospect, it is not surprising that there was no evidence of human remains found within the limits of the Río Claro site. Healy (2006, personal communication) notes that it is possible an independent cemetery may exist in the Río Claro vicinity, but there was no formal survey conducted outside the site limits.

In this section I have reviewed a broad range of mortuary customs for the Isthmo-Colombian Area. Evidence of connections between northeast Honduras and other, external, regions of the Isthmo-Colombian Area includes the use of secondary urn burials, artificial burial mounds, hilltop cemeteries, subterranean burials, and ethnohistoric accounts. I have demonstrated that definitive continuous connections exist between regions which are, at the same time, discontinuous with culture areas beyond the Isthmo-Colombian Area. The strongest thread tying together the various regions of the Isthmo-Colombian area is the concept of the independent village cemetery (Cooke 2005:159). Drolet and others (1984; Sheets et al. 1991:456) have suggested, and I agree,

that the systematic locating of cemeteries may imply a shared, normative, cosmological ordering based on separation from the village; or a separation of the dead from the living. This is an extremely interesting line of analysis that requires more intensive investigation.

Subsistence

Precolumbian subsistence practices in northeast Honduras appear to have been similar to those known from other regions of the Isthmo-Colombian Area in Period VI. Mixed economies were a hallmark of all Isthmo-Colombian regions, where hunting, fishing (for example, see Chapter 1), gathering, and horticulture/vegeculture all served as important and interdependent strategies (Begley 1999:35; Lange 1992c:426; Sheets 1992:23, 30). This is quite different from trends we see in Mesoamerica to the north and the Andes to the south, where intensive and extensive agricultural practices predominated.

In Mesoamerica, during the Late Classic through the Late Postclassic (roughly equivalent to Periods V and VI), maize was the predominant staple (Evans 2004:35, 52-53). In the Andes, during this same timeframe, there was an increased diversity in staples due to the vast environmental differences which existed between eco-zones. Staples included: tubers like potato and manioc, quinoa, maize, and beans (Bruhns 1994).

To date, there is no evidence for either extensive or intensive agriculture in most parts of the Isthmo-Colombian Area (raised fields and terraces in northern Colombia are a notable exception) like that we witness in Precolumbian Mesoamerica and Andean South America. In the Isthmo-Colombian Area, the main staples were root and tree crops. In Precolumbian Costa Rica, for example, staple crops were derived from cultigens and

wild flora that included manioc, *ñampí*, *pejibaye*, peach palm, cacao, guava, pineapple, and *mamey* (Ferrero 1981:96; Sheets 1992:30). Paleobotanical evidence suggests that although maize cultivation took place for thousands of years throughout the Isthmo-Colombian Area, especially in Costa Rica and Panama, it was viewed as a dietary supplement rather than a staple crop (Anchukaitis and Horn 2004; Sheets 1992:24). Linares (1977:73) describes early chronicler accounts which state that the site of Nata, in central Panama, mainly grew and stored maize for the purposes of trade with surrounding villages which had access to desired non-local subsistence resources such as meat and crabs.

Discussion

There is little to no archaeological or paleobotanical evidence for (non-faunal) subsistence strategies in northeast Honduras. Instead, ethnohistoric and ethnographic accounts provide the richest understanding of Precolumbian diet for the Northeast region. Precolumbian metates are a prominent artifact known from northeast Honduras and may provide us with some insights. Often cited as evidence for a dependence on maize processing, some Isthmo-Colombian Area researchers argue that metates were used for processing foodstuffs other than maize, particularly many different types of seeds (Sheets 1992:23). According to Helms (1975:117), early chroniclers have consistently noted the widespread use of sweet manioc throughout the Isthmo-Colombian Area at the time of European contact.

Ethnographic accounts of modern Pech groups state that salvaged prehistoric metates are typically used to process manioc (Begley 2000:43; Sapper 2000:51). Here the *mano* is used to crush manioc on the metate, and then used again later in the preparation

process to roll out the flour (Clark et al. 1985:36; Healy and Dennett 2006; Helbig 1956:37; Sapper 2000:50). A preference by the Pech for manioc over maize as a staple crop has been noted by several researchers. First noted by Sapper in 1899, the modern Pech continue to prepare and consume *sasal* (a steamed sweet manioc bread prepared *tamale* style), a tradition that is presumed to date to Precolumbian times (Begley 2000:43; Sapper 2000: 50). Holt (2000:45) states that *sasal* is known in recent times as "the national dish of the Pech".

Sapper (2000:51) suggests that this preference for manioc over maize is readily apparent in the fact that there are Paya words for all dishes prepared with manioc, but that the Pech use Nahua or *mestizo* words to describe many maize dishes (i.e., tortiyaha/ tortilla) as they do not have their own Paya words to describe them. He states that Pech subsistence practices and preferences are very different from those of Mesoamerican groups. Discussing Pech diet in the 19th century, Sapper (2000:50) states that "it is noteworthy that the Jicaques and the tribes of eastern Nicaragua also prefer manioc as their basic food, while it is rather unimportant for the tribes of the Maya area." As recently as the 1994 national census, the Pech reported that manioc (and other tubers) constituted a significant daily part (20%) of their diet (Vargas Aguilar 2006:18).

Carved and Ground Stone

There are many interesting aspects to carved and ground stone production in northeast Honduras, specifically, and the Isthmo-Colombian Area, generally. The following section examines production and decorative styles of ground and polished stone, elaborate metates, and monumental stone sculpture. Styles from northeast

Honduras are compared with those from other regions of the Isthmo-Colombian Area to demonstrate possible underlying shared ideology expressed in carved stone forms, symbols, and imagery.

There are several published accounts which, when evaluated collectively, appear to reflect a well-established lithic industry in northeast Honduras. The majority of portable ground stone artifacts from the region are ground and/or polished beads, pendants, celts, and axes of greenstone. Other common artifact types include bark beaters, pestles, and rubbing/pounding stones of basalt and other stone. Although manos and metates *are* ground stone implements, their special role in Precolumbian northeast Honduras culture necessitates a separate, focused review (which follows). It is important to note that none of the known greenstone artifacts from northeast Honduras are actually made of jade. In fact, while some of the greenstone is jadeite (serpentine, for example), much of it is a talc-like material (Begley 1999:175; Cuddy 2007:122; Strong 1935:62-66). Greenstone artifacts recovered from sites in northeast Honduras have traditionally been viewed as resulting from interregional trade (Healy 1992:97). However, in 1997, Begley (1999:175-176) identified a talc-like greenstone source along a small tributary of the Río Paulaya, in the Department of Olancho. This local source may have been mined, with materials traded at the intra-regional level, thereby reducing the hypothesized need for long-distance regional trade. In fact, this source may have provided raw materials or finished goods to sites as far away as the Bay Islands (i.e., Strong 1935:84). Regional styles of design execution and this local greenstone source support the suggestion that a well-established local lapidary industry existed in Precolumbian northeast Honduras.

Polished Ground Stone Celts and Pendants

Seventeen undecorated examples (whole and fragments) of polished ground stone celts of greenstone, basalt, and other stone were also recovered at Río Claro. Whole specimens ranged from 5.5-12.5 cm in length (Healy 1978b:25). Most sites in the Culmi Valley (Begley 1999) and the Bay Islands (Strong 1935) have yielded similar celt forms. The archaeological record of the Bay Islands demonstrates the widest range and variation of both utilitarian and ceremonial, or elaborate, celt forms from northeast Honduras. I focus mainly on elaborate celts (or "axe gods") because they provide some of the best evidence for examining possible shared ideology and aesthetic production norms.

Perhaps the most tangible connection between elaborate greenstone celts of northeast Honduras and other regions of the Isthmo-Colombian Area can be found in the execution of highly diagnostic zoomorphic (especially avian) imagery associated with this artifact type. Although the smallest versions of these greenstone celts are often referred to as "pendants" because of drilled perforations, presumably for suspension holes (i.e., Lange 1992d), I have chosen to include all anthropomorphic greenstone celts ("axe-gods" and celt-pendants) and true pendants with anthropomorphic imagery within this category.

None of the greenstone celts from Río Claro exhibits carved imagery, yet many examples of these exist at sites throughout northeast Honduras. The Bay Islands sites have produced the best examples of "axe gods". During my research trip to the Smithsonian, I was able to view the entire greenstone collection from the region and noted that there were dozens of these artifacts. Most of the northeast Honduras examples appear as vague "imitations" of more elaborate southern examples, with an emphasis on

recreating well-known human and (especially) avian axe/celt traditions. Manufacturing techniques for the northeast Honduras specimens appear to be underdeveloped when compared to southerly examples (see Cuddy 2007:126, Figure 6.8). Often the carved lines (executed with what may have been a string saw) are more shallow, incomplete, and/or extremely sloppy in the northeast Honduras examples (Cuddy 2007:125; Lothrop 1955). Archetype greenstone "axe gods" are well known from, and are believed to have originated in, Costa Rica sometime during the Zoned Bichrome Period (1000 B.C.-A.D. 500) (Lange 1992d:115-118; Lothrop 1955:43). Unlike northeast Honduras, a small portion (15%) of the known "axe-gods" and pendants from Costa Rica are actually considered "jade". The majority of artifacts are made of softer types of greenstone (Lange 1992d:117), such as the jadeite and/or talc we see from northeast Honduras.

The greenstone avian "axe god" celt/pendant artifact class provides the clearest example of shared tradition between northeast Honduras and other regions of the Isthmo-Colombian Area, especially Costa Rica. The apparent "proto-type" for the avian "axe god" can be found among examples from the Atlantic Watershed (Figure 5.4a). Similar greenstone avian "axe god" celts are known from the Costa Rican portion of Greater Nicoya (Figure 5.4b). These "southern" examples of greenstone "axe gods" and pendants tend to be more standardized in size than those of northeast Honduras, ranging from 4-10 cm in length (Cuddy 2007:125). Figure 5.5 illustrates avian "axe gods" from the Trujillo region. One celt is quite large (roughly 12 cm x 9.5 cm) and seemingly unique in this respect (Figure 5.5, left), with other examples much smaller in size (9.5 cm x 3 cm) being more like examples typical of the Isthmo-Colombian Area in general (Figure 5.5, right).

a **b**

Figure 5.4. Avian jade "axe gods" from the (a) Atlantic Watershed (Snarskis 1981a:21, plate 6) and (b) Greater Nicoya (Easby, 1981:137, plate 68), Costa Rica.

Figure 5.5. Greenstone "axe gods" from the Trujillo region, northeast Honduras (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, catalogue #372540)

Hand Pestles

Excavations at Río Claro have yielded elaborately ground hand pestles. Most of the examples recovered represent very crude (and roughly shaped) pounding stones. However, there is one excellent example of a small (5 cm in height and 4-4.8 cm in diameter), well ground and symmetrical pestle. Tall, elaborate pestles are known from northeast Honduras as well. One fine example was examined by me at the Smithsonian

Institution. Figure 5.6 is a picture of this pestle, approximately 15 cm in height, discovered along the Río Platano. This specimen is similar to, although once again more rudimentary than, many examples from the Atlantic Watershed and Central Highlands of Costa Rica (ranging from 14-24 cm in height), which date from 300 B.C. until at least A.D. 900 (Figure 5.7) (Graham 1981:122; Snarskis 1998:22). Healy (1980:280-282) describes tall pestles, similar to those just discussed, for the Rivas region of Pacific Nicaragua.

Figure 5.6. Ground stone pestle, Río Platano vicinity, northeast Honduras (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, catalogue #A149835).

Figure 5.7. Ground stone pestles, Atlantic Watershed, Costa Rica (Graham 1981:129, plates 60 and 61).

Mace Heads

Although none were recovered at Río Claro (Healy 1978b), ground stone mace heads are known from various sites in northeast Honduras. Mace heads are generally identified by their shape and diagnostic central perforation, presumably for hafting. Two prevalent mace head styles are documented from sites on the Bay Islands in Period VI contexts; donut-shaped and a four-pointed star shape (Figure 5.8) (Cuddy 2007:120). Donut-shaped examples have also been recovered from sites on the mainland as well (Clark et al. 1982). This particular artifact type has also been referred to as a donut-stone by some researchers who suggest that they may have served as weights on agriculture-related digging sticks (Begley 1999:172-174). Alternatively, Cuddy (2007:120) suggests that they likely represent ceremonial mace heads due to the ritual contexts in which they have been found. Lange (1992d:118; 1993:289-290) notes that many students of Costa Rican archaeology alternatively refer to these items as ceremonial "war clubs", and he supports the possibility of these serving as symbolic devices for the public display of social rank.

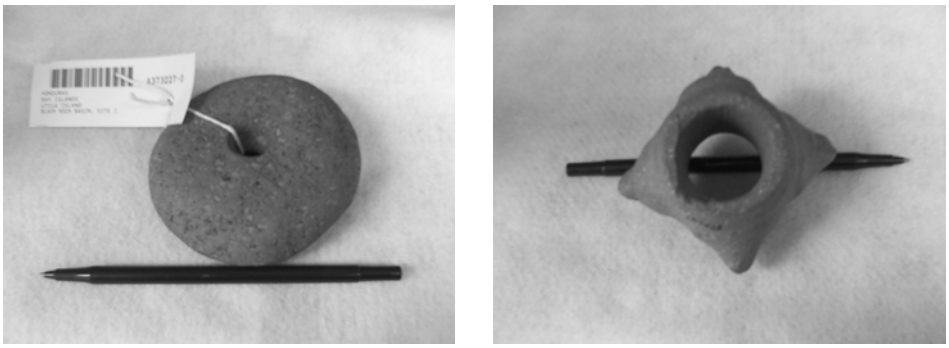


Figure 5.8. Donut-shaped (*left*) and four-pointed star (*right*) mace heads, Bay Islands, northeast Honduras (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, catalogue # 373227 and 373291, respectively).

In northeast Honduras, mace heads appear to reach their pinnacle of use at the onset of Period VI (Cuddy 2007: 120). Throughout Periods IV and V, ground stone mace heads with highly diagnostic regional variants played an important role in Precolumbian culture throughout the Isthmo-Colombian Area, especially in the various archaeological regions of Costa Rica. In Greater Nicoya, for example, mace heads had more elaborate decorative styles, with prominent examples of human, feline, and avian head imagery on a variety of fine grained stones (Lange 1992d:118; 1993:291). One instance of a donut-shaped mace head from Guanacaste, Costa Rica, provides a hint of a connection between this southerly region and northeast Honduras (see Snarskis 1981a:28, plate 10). Snarskis (1981a) notes similar regional variants of ground stone mace heads for the Central Highlands and Atlantic Watershed of Costa Rica. Mace heads have also been recovered in the Diquís region further south. Another connective thread to northeast Honduras may be with the early appearance of donut-shaped mace heads in this region (see Drolet 1992:219, 221, Figure 5, item 41).

Figure 5.9. "Owl" mace head (*left*), Atlantic Watershed and a donut-shaped mace head (*right*), Guanacaste-Nicoya, Costa Rica (Snarskis 1981a:28, plates 9 and 10).

Elaborate Metates

Perhaps the most aesthetically pleasing artifacts to survive in the archaeological record of northeast Honduras are the elaborate ground and carved stone metates which began to be produced in the region in Period V (Begley 1999:161). There appear to have been two types of metates used throughout northeast Honduras: the minimally-modified, river cobble, basin-style (or "turtle back") metate; and the elaborately ground and carved "sway-back" tripod metate. The latter, elaborate (monolithic) metates from northeast Honduras are typified by three angled legs (two at the rear and one at the head) and a well-executed, curved or "sway-back" plate of consistent thickness. Many examples exhibit a carved *adorno* "head" (typically, reptilian, avian, or feline), carved geometric patterns on the exterior edge of the metate plate, or a combination of both (Begley 1999:161). Evidence for both metate types was recovered at Río Claro (Healy 1978b:25). A single elaborate metate plate fragment is included in the Río Claro artifact collection housed at Trent University. This fragment exhibits one finished edge, carved with a "greca", or Greek key design (Cuddy 2007:120). This iconographic motif seems to be part of a long-standing Isthmo-Colombian area tradition found on many elaborate metates.

Begley (1999:165) notes the occurrence of rough, utilitarian, basin-style and elaborate, legged metates throughout the Culmi Valley of northeast Honduras. Through his survey and identification of over 80 sites in the valley, Begley (1999:161) identified elaborate metates one might deem a "reasonable" or normal size for grinding purposes. He suggests that many of the hundreds of elaborate metate examples he encountered showed little to no signs of use wear (Begley 1999:165). Miniature elaborate metates,

with no readily apparent functional use, are common throughout northeast Honduras, with some examples reaching only 10 cm in length. Alternatively, gigantic elaborate metates have also been reported at sites such as La Paleta. These giant metates can reach 1.5-2 m in height, and others have been reported weighing from 6-8 tons (Begley 1999: 165; Healy and Dennett 2006; Helbig 1956:30; Stone 1972:132). Strong (1935) and Stone (1941) document and discuss multiple examples of elaborate metates with striking *adornos* from both the Bay Islands and the north coast of mainland Honduras (Figure 5.10 and 5.11). The *adornos* of these metates often represent a reptilian (or serpent) head with a diagnostic tongue that loops upward, often terminating in a round bead where it attaches to the nose (Figure 5.11). Avian images are also very common (Figure 5.10).

Figure 5.10. Elaborate tripod metates with avian *adornos*, Bay Islands, northeast Honduras (National Museum of Natural History, Smithsonian Institution, Department of Anthropology, catalogue # 373415 and 373424, respectively).

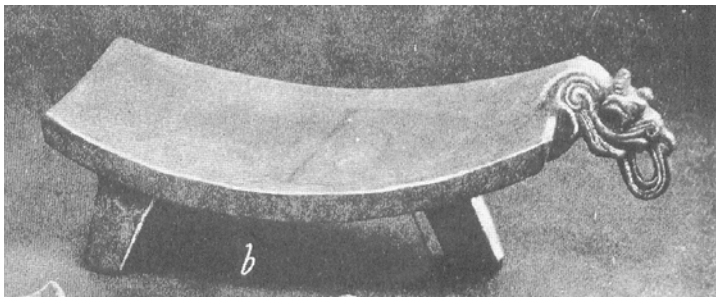


Figure 5.11. Elaborate tripod metate with reptilian *adorno*, Aguán Valley, northeast Honduras (Stone 1941:44, figure 34).

Parallels have been drawn between elaborately-carved grinding stones from northeast Honduras and those from other regions of the Isthmo-Colombian Area, especially southeastern Costa Rica, for more than 60 years (Healy and Dennett 2006; Stone 1941:81). In fact, the elaborate, legged metate tradition appears to be the strongest indicator of material cultural affiliation and seems to have been an important item in almost every region of the Isthmo-Colombian Area (Graham 1992:167). As discussed for northeast Honduras, most regions of the Isthmo-Colombian Area also produce minimally modified, basin-style metates as well as the elaborate types (Grieder 1993:43).

In southernmost Honduras, examples of elaborate metates, with "greca" incising on the plate edge and reptilian *adornos* similar to those from northeast Honduras, have been found along the Pacific coast, on islands in the Gulf of Fonseca (Figure 5.12, top left) (Stone 1972:132). Stone (1972:132) notes other instances of this reptilian headed metate occurring in the Comayagua and Choluteca Valleys of Central and Southern Honduras. Whether these metates are the result of inter-regional trade from northeast Honduras, or the result of local production involving shared stylistic design traditions, remains to be demonstrated. The similarities in style and design are striking. Elaborate metates, with unique feline head *adornos*, are also known from southwest Nicaragua (Figure 5.12, top right) (Stone 1977:125).

Elaborate metate traditions abound through the various archaeological regions of Costa Rica as well. Beautiful and intricately carved elaborate tripod metates are known from Guanacaste, part of Greater Nicoya, in Period V (A.D. 500-1000) (Graham 1981:115). Although the basic production methods are identical to elaborate metate production in northeast Honduras from this period and later, metates from northwest

Costa Rica exhibit “enhanced” carved design features, such as low relief designs on the *underside* of the metate plate and legs, and/or elaborate and stylized carved perforations on the legs and *adorno* (see Graham 1981:116-117, plates 47-50; Lange 1993:287-289, 300-301). Snarskis (2003:176) also notes “effigy-head curved metates with trapezoidal tripod supports” from the site of Finca Linares in Guanacaste. These Nicoya-style metates are also known from the Atlantic Watershed of Costa Rica (Snarskis 1981b:190-191, plates 72-78). Oddly, examples recovered from the vicinity of Arenal (between Guanacaste and the Central Highlands) show a distinct similarity to elaborate metates produced in northeast Honduras, as opposed to the “fancier” styles from neighbouring Nicoya (Sheets and McKee 1994: see Figure 12.2).

The Atlantic Watershed and Central Highlands of Costa Rica also boast a unique, yet intriguingly similar, regional style of elaborate metate production. Four-legged metate forms appear in the Atlantic Watershed in Period V, and represent a shift from the traditional three-legged metate form which dominated early times (Graham 1992:168). These are typically quadruped metates with feline heads and a diagnostic tail which curves down and attaches to one of the hind legs, forming what appears to be a functional handle (Figure 5.12, bottom right). In Period VI, oval and rectangular plated metate forms, with geometric carving along the plate edge and/or zoomorphic *adornos*, continue to dominate (Snarskis 2003:191). Elaborate tripod metates with carved designs on the legs and plate rim have also been reported from archaeological contexts in the Diquís region (Fernández and Quintanilla 2003:216). Although older than examples discussed for northeast Honduras and other regions, the site of Barriles in western Panama had a “giant” elaborate metate (2.3 m in length, currently housed at El Museo Antropológico

Reina Torres de Arauz, Panama City) associated with multi-community cemetery zones (Cooke 2005:159).

Figure 5.12. Examples of elaborate metates from the Gulf of Fonseca, Honduras (top left) (Stone 1972:132); Greater Nicoya, Nicaragua (top right) (Stone 1972:125); Guanacaste, Costa Rica (bottom left) (Snarskis 1981b:190, plate 73); and Atlantic Watershed, Costa Rica (bottom right) (Stone 1972:181).

Discussion

Evidence of carved and ground stone artifacts from various regions throughout the Isthmo-Colombian Area provide a strong argument for a unified, or at least shared set of lithic traditions and cultural affiliations. This seems especially true of linkages in carved stone between northeast Honduras and regions of Costa Rica. The similarities between greenstone "axe gods" and pendants from both northeast Honduras and Costa Rica were noted by Lothrop (1955:46) over half a century ago. With additional evidence compiled since then, this possible early identified connection has been reinforced. Elaborate metate production is another particularly interesting parallel of Isthmo-Colombian Area stone working traditions.

I take this opportunity to introduce the hypothesis that both extremely large and

miniature metates of northeast Honduras may have served as a regional icon, or a type of local community identifier. This unique style of stone carving may have served the same regional needs in northeast Honduras that other, well-recognized regional carved stone traditions served. Examples include alter-ego statues from Pacific Nicaragua; shaman and warrior statues and slabs carved in the round from the Central Highlands and Atlantic Watershed of Costa Rica; peg-based statues and large stone spheres from the Diquís region of southwestern Costa Rica; basalt columns and statues from the Chíriqui region in western Panama; and perhaps even the fanged, carved-stone statues of Colombia (i.e., San Augustín). Although I will not elaborate the idea further here, I believe it is an intriguing line for future analysis, but one which will require more research and better contextual data.

Ceramics

Ceramics, the focus of this thesis, provide some of the best indications for linkages to southern regions of the Isthmo-Colombian Area. I have chosen examples that demonstrate intra-regional standardization and inter-regional connections in decorative and stylistic pottery forms. The following discussion highlights some strong, cohesive elements which represent shared ceramic traditions throughout northeast Honduras and the Isthmo-Colombian Area.

Intra-Regional Modal Connections

Variants of all the Period VI type-varieties identified at Río Claro are remarkably similar to published evidence from most other sites of northeast Honduras. Although there are not many Period VI sites documented for the region, and even less illustrative

evidence, there are clear and definitive ties evident in the decorative modes. Primary sources for this intra-regional comparative exercise are the Río Claro ceramic collection at Trent University and the northeast Honduras collection at the Smithsonian Institution's National Museum of Natural History, as well as the published works of William Duncan Strong (1935), Doris Stone (1941), Paul Healy (1978b, 1993), and Christopher Begley (1999). Below are some examples of important modes identified from the Río Claro collection that have now been found at other documented sites within the Northeast region. As complete modal descriptions were provided in Chapter 4, only a brief discussion of modal distributions is provided here. Figure 5.13 illustrates various archaeological sites from Period VI northeast Honduras (A.D. 1000-1530), including sites discussed in the following subsection.

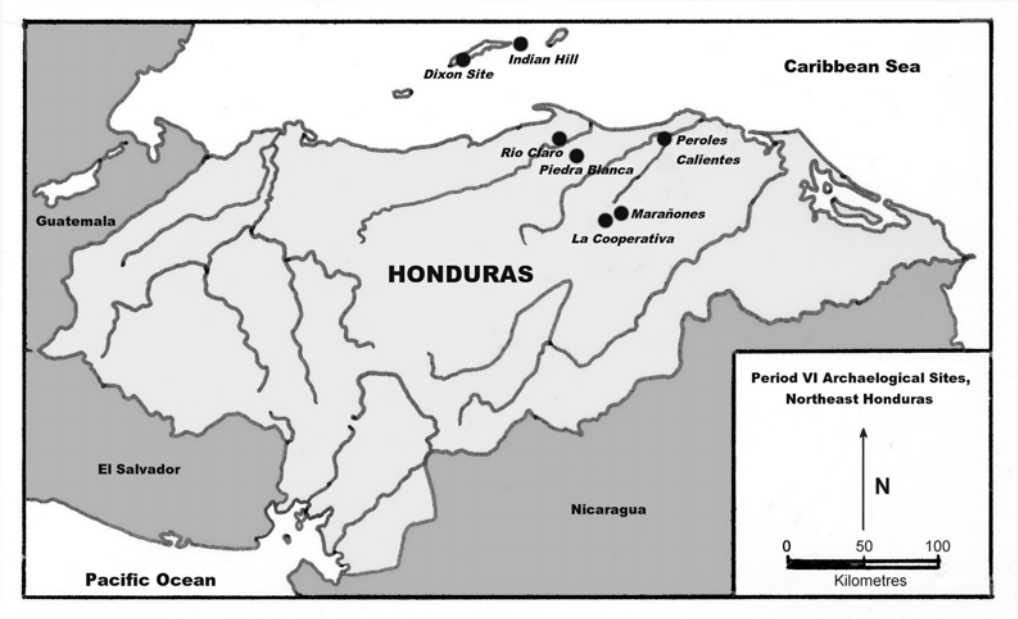


Figure 5.13. Period VI archaeological sites of northeast Honduras.

Support Modes

Vessel support modes appear to be one of the richest sources of comparative iconographic ceramic information from northeast Honduras, as vessel supports on Period VI pottery are often quite elaborate. As will be discussed later, support modes are also the primary source of comparative material when examining potential ties with external regions of the Isthmo-Colombian Area.

Vertical Groove Support

Supports with this mode are typically solid and conical. However, this mode is also, though more rarely, seen on tubular, hollow supports (Fig. 5.15, far right). The Vertical Groove support is a very common mode, with highly standardized versions occurring in both the Bay Islands and on the mainland in the Río Aguán and Río Sico Valleys. It is also the most common support form at Río Claro.

Figure 5.14. Vertical Groove Supports from Río Claro.

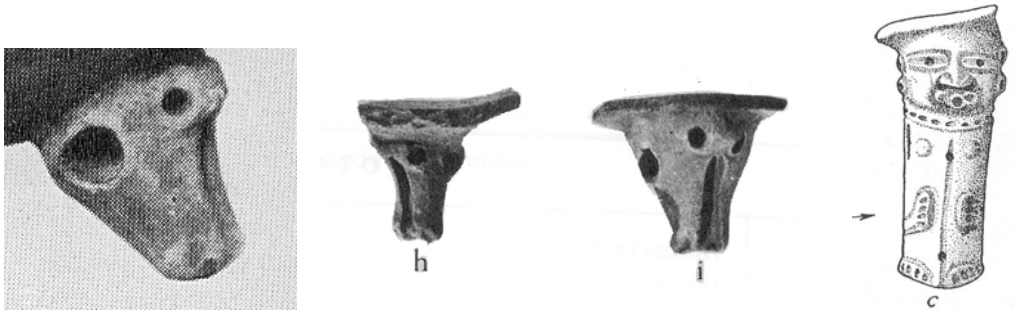


Figure 5.15. Vertical Groove Supports from; *far left* and *far right*: Sacrificial Spring, Bonacca Island and Indian Hill, Barburata Island (Strong 1935:103, Plate 31); and *centre*: Piedra Blanca, Colon (Véliz 1978:25).

Pump Heel Support

The Pump Heel support mode is so-named because it looks like the pump heel from a woman's dress shoe. This mode occurs frequently in the archaeological record of Bay Island and adjacent coastal mainland sites and appears to be an important support for Period VI northeast Honduras.

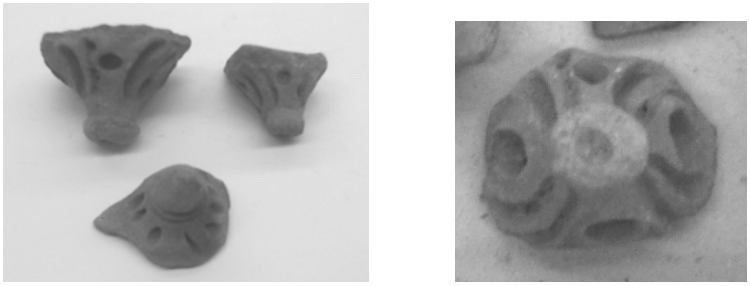


Figure 5.16. Pump Heel Supports from Río Claro.

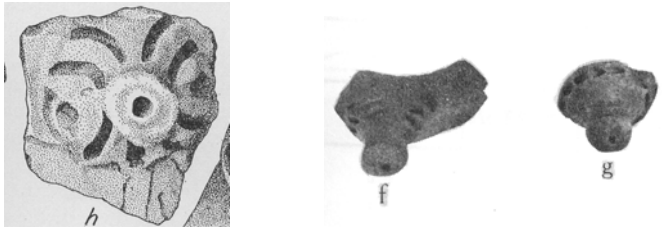


Figure 5.17. Pump Heel Supports from; *left*: Indian Hill, Barburata Island (Strong 1935:101); and *right*: Piedra Blanca, Colon (Véliz 1978:25).

Lug/*Adorno* Modes

Lug and *adorno* modes can also be classified as vessel handles in many cases (as I have done in the Río Claro modal analysis, see Chapter 4). Like supports, these modes tend be a rich source of comparative iconographic representation throughout northeast Honduras in Period VI. However, unlike supports, which serve both a practical and decorative function, it appears that lugs and *adornos* can be either functional and decorative, or merely decorative.

El Rey *Adorno*

This mode is typically seen in monochrome wares but is also noted frequently on the *adornos* of Bay Island polychromes (i.e., Figure 5.19, right). In the latter case, the El Rey, or "the king", *adorno* appears to be strictly decorative in nature, although in several instances the large hole which represents the "eye" of El Rey might have permitted a stick or rope to be used to lift the vessel. This remains to be verified. The distribution of this mode in northeast Honduras appears to be restricted to the Bay Islands and adjacent coastal valleys on the mainland.

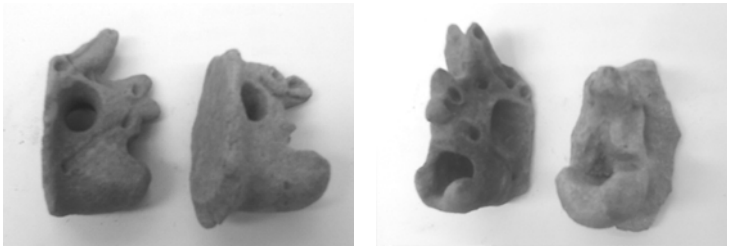


Figure 5.18. El Rey *Adornos* from Río Claro.

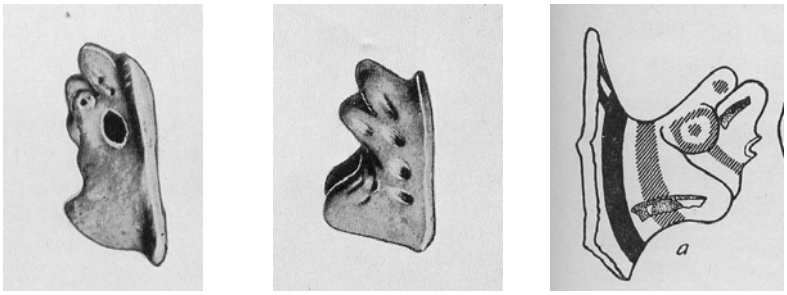


Figure 5.19. El Rey *Adornos* from; *left* and *centre*: Peroles Calientes, Río Negro area (Stone 1941:32) and *right*: Indian Hill, Barburata Island (Strong 1935:91).

Rider Lug

There appears to be two distinct varieties of this mode. One variety is more standardized (Figures 5.20, left; 5.21, left and centre) than the other (Figures 5.20, right; 5.21, right). The lug typically has a slit or puncture holes running along the length of the

appendage beneath the appliqué figure of a “rider”. Some examples also seem to have a large hole that runs lengthwise through the lug (see Figure 5.21, left). Some examples also have distinctive lateral perforations (Figure 5.21, right). One example from the Río Claro collection has a large rock inside, seemingly designed as a “rattle”. Again, this mode appears to be restricted to the Bay Islands and adjacent coastal valleys of the mainland.

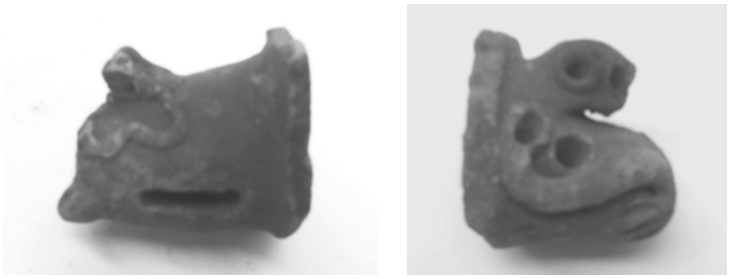


Figure 5.20. Rider Lugs from Río Claro.

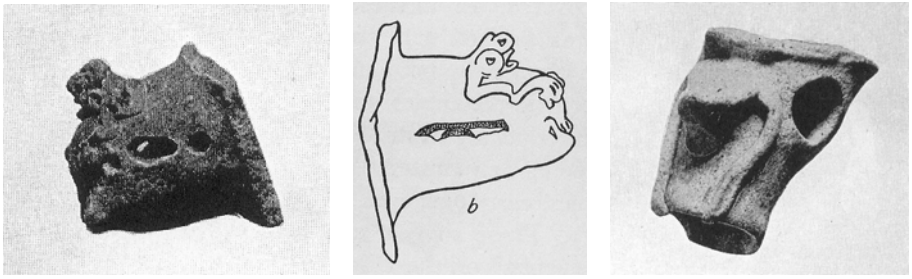


Figure 5.21. Rider Lugs from; *centre*: Indian Hill, Barburata Island (Strong 1935:91); and *left* and *right*: Peroles Calientes, Río Negro area (Stone 1941:33).

Serpent Head *Adornos*

Serpent Head *adornos* are rendered somewhat variably throughout northeast Honduras in Period VI. However, the basic Serpent Head form remains quite standard with a raised ridge “eye-brow” and a diagnostic protruding elongated “tongue”, extending from the mouth and looping to attach at the “nose”. This Serpent Head motif is also found represented in alternative media, such as on metates (see Figure 5.23, right). All Serpent Head modes on Río Claro pottery have an appliqué tongue to nose loop that may

be unique to the site. The Serpent Head mode is typically executed on monochrome pottery. However, Strong (1935:91, Figure 22 c) illustrates a Serpent Head lug, which he describes as an iguana head, from a Bay Island Polychrome vessel. This mode is extremely common at sites throughout northeast Honduras.

Figure 5.22. Serpent Head *Adornos* from Río Claro.

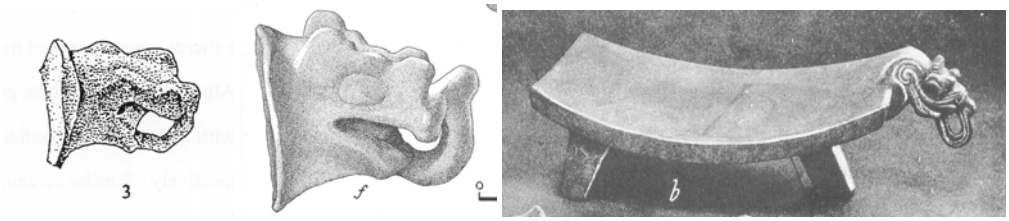


Figure 5.23. Serpent Head *Adornos* from; *left*: Culmi Valley, Olancho (Begley 1999: 139); *centre*: Indian Hill, Barburata Island (Strong 1935: 97); and *right*: Metate, Aguán Valley (Stone 1941: 44).

Inter-Regional Modal Connections

Having examined the intra-regional comparisons, I turn now to connections further afield. There are definable ceramic modes found throughout northeast Honduras that are similar to those of other regions of the Isthmo-Colombian Area. These similarities are apparent in form and decorative styles. The following discussion compares important support and handles modes from northeast Honduras to those found in other regions of the Isthmo-Colombian Area.

Support Modes

Ceramic vessel supports are, by far, the greatest source of comparative modal data for linking northeast Honduras with other regions of the Isthmo-Colombian Area. This comparative examination will demonstrate that *similar modes* occur not only at the inter-regional level, but that they also seem to remain less prone to change and variation across time and space than other decorative modes.

Paw Foot Support

The Paw Foot support mode is typically a conical support with a (feline?) paw at the distal end. The two examples illustrated below (Figure 5.24, left and centre) indicate that this mode co-occurs with other decorative modes noted from northeast Honduras. Both examples from northeast Honduras have the paw at the distal end of a hollow, incised tapered leg. Strong (1935:94-95) suggests that the Paw Foot support is common in the Bay Islands. Paw Foot supports from other regions of the Isthmo-Colombian area occur but seem to lack incised decoration, and it is uncertain (from publications) whether or not these examples occur on hollow or solid legs. The example illustrated by Linares (1968: Plate 16) comes from the Chiriquí Period (A.D. 1100-1530) and is believed to be from a trade ware originating in the Diquís Delta (Figure 5.24, right centre). Snarskis (1978:224) notes that the La Zoila Complex of ceramics from the Atlantic Watershed (late Period V) include feline mammiform effigy vessels with Paw Foot supports (i.e., Figure 5.24, far right). There is not much published information about this type of support mode, but it is highly recognizable. By discussing it here, I hope to learn more about its prevalence from others conducting research in the Isthmo-Colombian area.

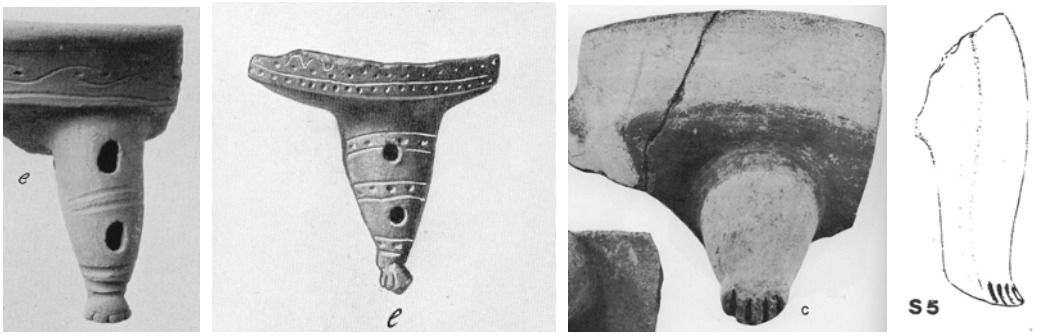


Figure 5.24. Paw Foot Supports from; *far left* and *left centre*: Indian Hill, Barburata Island (Strong 1935: Plate 30) and the Aguán Valley (Stone 1941:46), northeast Honduras. *Centre right*: La Pitihaya, Gulf of Chiriquí, Panama (Linares 1968: Plate 16); and *far right*: Central Atlantic Watershed, Costa Rica (Snarskis 1978:365).

Vertical Groove Support

The Vertical Groove support mode is characterized by a deep groove running vertically down the centre of the vessel support. In northeast Honduras this mode tends to occur on *solid* conical supports, while in other regions of the Isthmo-Colombian area it generally occurs as an opening into *hollow* tubular supports, although this is variable. The Vertical Groove Support Mode is an important mode in the Diquís subregion of Costa Rica (Drolet 1992; Stone 1965) and Chiriquí region of Panama (Linares 1968) in Period VI. Corrales (2000:256, mode S8), discussing ceramics of the Diquís region, describes this mode occurring on "solid supports with a frontal central depression". Along the Atlantic Watershed of Costa Rica, this is also an important support mode in Periods V and VI (AD 500-1530) (Snarskis 1978; Stone 1972). For the La Selva Complex ceramics, for example, especially the Sandy Appliqué Group, Snarskis (1978:360, S10) describes "hollow conical tripods… with a long rectangular vent at the exterior", which appears strikingly similar to the Vertical Groove support mode of northeast Honduras.

Figure 5.25. Vertical Groove Supports from Río Claro.

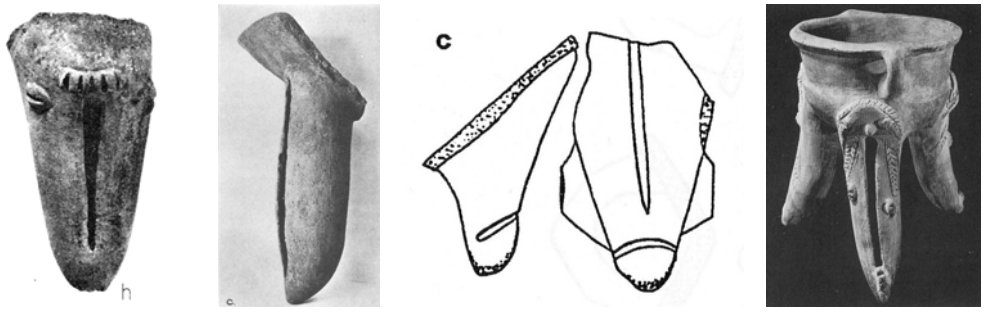


Figure 5.26. Vertical Groove Supports from; *far left*: the site of La Pitihaya, Chiriquí Region, Panama (adapted from Linares 1968: Plate 15); *centre left*: Terraba Valley, Diquís Region, Southeast Costa Rica (Stone 1942: Plate 6); *centre right*: Diquís Region, Costa Rica (Corrales 2000: 275); and *right*: Diquís Region, Costa Rica (Stone 1972: 202).

Slotted Support

The Slotted support mode is known mainly from northeast Honduras, Atlantic and Central Highland Costa Rica, and the Diquís region of Costa Rica. However, the way in which the slots are executed, and the overall form of the supports, varies somewhat from region to region. Corrales (2000:132) describes the second most important support mode in the Diquís region as being "hollow supports with slits, appliqué, and incision", in Period VI. These represent almost one quarter of all the supports encountered in his analysis of ceramics from southeastern Costa Rica. The drawing he presents (see Figure 5.28, right) is distinct from the others illustrated here (Figure 5.27 and Figure 5.28, left and centre). However, I would argue that the styles are similar enough to warrant inclusion in this mode category.

Figure 5.27. Slotted Supports from Río Claro.

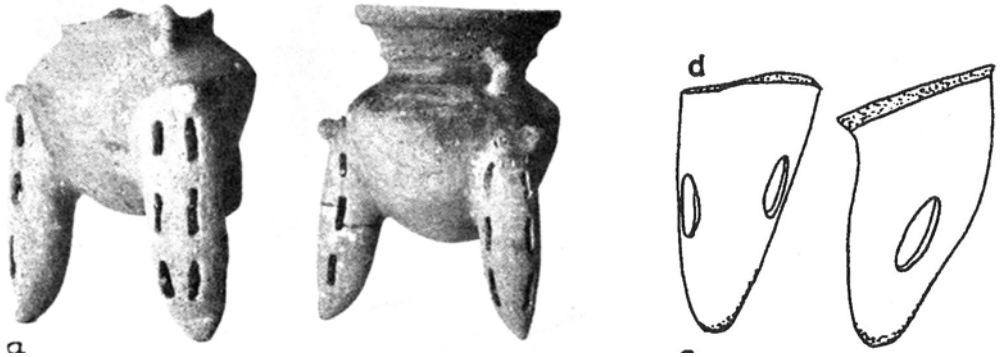


Figure 5.28. Slotted Supports from; *left and centre*: two vessels from the Terraba Valley, Diquís region (Stone 1942: Plate 5); and *right*: Diquís region, Costa Rica (Corrales 2000: 274).

Handle Modes

Handle modes hint at underlying ties between northeast Honduras and other regions of the Isthmo-Colombian Area in Periods V and VI. Here I present some examples of highly identifiable handle modes.

Twisted Cord Handle

This mode is, quite literally, a twisted cord of clay which forms a vertical exterior handle. Although there are no examples of this mode from the Río Claro collection, it is

seen on vessels illustrated from both the Bay Islands and mainland northeast Honduras (Figure 5.29, left and centre)**.** More than sixty years ago, Stone (1941:8) noted the twisted cord handle in northeast Honduras and suggested that this mode was difficult to classify definitively as Pech (Paya) because it is a handle form found in many other regions of Lower Central America. Indeed, Corrales (2000:277, Mode H5) states that this is an important mode in Period VI throughout southeastern Costa Rica.

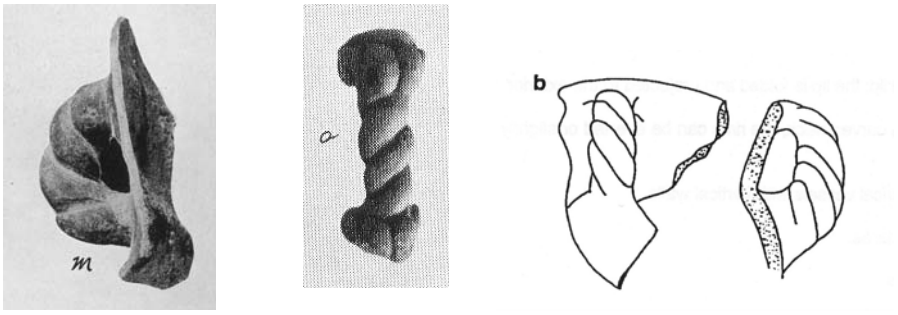


Figure 5.29. Twisted Cord Handles from; *left*: Peroles Calientes, Río Negro Area (Stone 1941: 36) and *centre*: Dixon Site, Roatán Island (Strong 1935: Plate 27), northeast Honduras. *Right*: Diquís region, Costa Rica (Corrales 2000: 277).

Elaborate Appliqué Strap Handle

This mode is characterized by elaborate, stylized, and zoomorphic or anthromorphic decorative appliqué applied to a relatively thick and wide, vertical, strap vessel handle. In northeast Honduras the appliqué is generally accompanied by linear incision and, in many cases, punctate design. The choice of exact decorative appliqué varies by region, but the general technique appears to be widespread throughout the Isthmo-Colombian Area. Snarskis (1978:380, H11), for example, notes an important handle mode that is almost exactly the same as that seen below from the Chiriquí region, Panama (Fig. 5.30, right centre).

Figure 5.30. Elaborate Appliqué Strap Handles from; *far left* and *left centre*: Río Claro, northeast Honduras; and *right centre* and *far right*: Gulf of Chiriquí, Panama (Linares 1968: Plate 18).

Discussion

At the intra-regional level of analysis, many sites of northeast Honduras exhibit extremely similar, if not identical, modal forms and styles. Vertical Groove and Pump Heel supports, as well as "El Rey" *adornos*, Rider lugs, and the unique execution of Serpent Head *adornos* illustrate close and continuous ties in ceramic production at archaeological sites of northeast Honduras in Period VI. There are also several support and handle designs that demonstrate a clear connection between ceramic modes of northeast Honduras and modes from other regions of the Isthmo-Colombian Area. Vertical Groove, Paw Foot, and Slotted supports, as well as Twisted Cord and Elaborate Strap handles, are all highly diagnostic and provide the clearest examples of this connection. In fact, it might be reasonably argued that all regions of the Isthmo-Colombian Area shared from a pool of long-standing basic production and decorative traditions, infused with a veneer of regional identity in their execution.

Evaluation of Interpretive Models: Northeast Honduras and Its Relationship with the Isthmo-Colombian Area

Cuddy (2007:3) has recently suggested that Precolumbian northeast Honduras was a completely autonomous culture region which existed in the geopolitical cleavage between the Mesoamerican and Intermediate Area culture areas. By this he means that northeast Honduras was without cultural or political affiliations to either external culture area. He suggests that a unique chiefdom level of sociopolitical organization existed where internal links and affiliations were tightly bound. The region presented a powerful, symbolically autonomous identity to groups of both Mesoamerica and the Intermediate Area (Cuddy 2007:4). Accordingly, interaction with (and influence from) these external areas was regulated, and conducted within the central objective of negotiation and maintenance of a corporate (inclusive) political "national" identity (Cuddy 2007:8-11). Cuddy (2007:12-13) further suggests that the unique material culture of northeast Honduras was intentionally designed to act as a distinctive "branding" of the social communities of the region, and as a symbol of their autonomy in a milieu of political competition with external regions.

However, Cuddy (2007) fails to investigate the current literature on the contemporaneous material culture and socio-political development of Isthmo-Colombian Area groups. Like other researchers before him, Cuddy (2007:35) espouses the long-held, and now questionable, view that the Pech and all other Lower Central American groups were of South American origin. In my model, the Pech are not a group originating in South America, but rather a local, *in situ* development of Chibchan speaking peoples (see Hoopes 2005). An independent northeast Honduras in Period VI, although having "roots"

and traditions in the Isthmo-Colombian “core” area of Costa Rica and western Panama, should somehow demonstrate a unique Northeast Honduran ethnogenesis had it broken from the “core”, both geographically and culturally, sometime around A.D. 300. By “unique ethnogenesis” I mean to indicate the development of a new, non-traditional cultural identity (accompanied by a new, non-traditional material culture repertoire) or socio-political structure. Ethnogenesis is determined by local agents actively choosing to depart from traditional affiliations (linguistic, material, religious, economic, political, etc.) through the construction of a new identity based on relationships and interaction with external cultural, linguistic, and/or ethnic groups located in immediate geographical proximity (see Jordan and Shennan 2003). According to Van Gijseghem (2006:422-423), archaeologists should be able to detect ethnogenesis occurring in the archaeological record through material culture markers that denote a period of initial simplification followed by a social-political rearrangement that reflects new and different ideologies and the rejection of long-standing traditions.

The highly standardized material culture of Period VI northeast Honduras can potentially provide the appearance of complete socio-cultural and socio-political autonomy (or unique ethnogenesis), as has been suggested by Cuddy (2007). However, at a broader level of analysis, his model becomes weaker. He fails to provide an evaluation of extant data throughout the isthmus, focusing instead on differences, while glossing over similarities with external regions. In the process, by doing so, he has chosen to ignore a wealth of data which challenges his argument in some fundamental ways. Again, if Precolumbian groups of northeast Honduras were trying to achieve a unique, autonomous identity it would seem logical to expect a rejection of, or sharp movement

away from, older material culture traditions. This is not the case.

There are inherent problems with trying to define a static representation of a dynamic socio-cultural developmental trajectory. Van Gijseghem (2006:421-422) provides an interesting caution about trying to differentiate between frontier regions and independent regions:

> "The frontier social landscape, therefore, is composed of – and will develop in accordance with – something akin to a cultural "founder's effect". As the metropole experiences further changes according to its own immediate sociohistorical circumstances, so does the frontier, but both are not expected to develop in a coordinated manner. The greater the level of frontier insularity, the wider the historical gap that will develop, and the frontier will be characterized, from the archaeologists' bird's eye view, as a "new" society or at the very least, as a sudden set of discontinuities in the archaeological record."

Cuddy may have succumbed to the conundrum that Van Gijseghem outlines. I now review evidence for an alternate model which suggests that northeast Honduras was not an independent socio-political region in Period VI but, rather, was a frontier region of the broader Isthmo-Colombian Area with longstanding cultural affiliations to the Chibchan "core".

Van Gijseghem (2006:419-420) defines a frontier as:

> "a geographical area that is situated outside of the boundaries of ordinary social existence and which is comparatively devoid of legitimate authority from the perspective of the intrusive group. When they enter and settle a frontier, selected social segments can manipulate and negotiate tradition to their own advantage, which necessarily has transformative effects, especially in middle-range societies in which frontier leadership is not regulated by a centralized authority."

I would argue that Precolumbian northeast Honduras represents this type of frontier, as defined by Van Gijseghem, and that unique aspects in the material culture repertoire are the result of transformative effects best explained by the remote, insular geographic

location of the region, and a resultant differential rate of unregulated cultural change between it and other regions of the Isthmo-Colombian Area.

Numerous examples of artifact and cultural affiliations outlined in the previous section provide a basis for arguing that northeast Honduras was the northernmost frontier of the Isthmo-Colombian Area, including: language, architecture and settlement planning, mortuary customs, subsistence, carved stone traditions, and ceramics. A deeper analysis of these different cultural elements, across the Isthmo-Colombian Area, shows there are, in fact, many similarities. As such, the regionalization seen by Cuddy is "surface veneer", perhaps better understood as the result of variation due to the transformative effects of residing on a frontier as outlined above by Van Gijseghem. Regionalization is actually one of the defining factors used to tie the broader Isthmo-Colombian culture area together (Cooke 2005; Hoopes 2005; Willey 1984), and is perhaps no different than regionalization occurring in the Maya subarea in the Late Classic period (Henderson 1997: 140). We need to be cognizant that developmental trajectories of cultures of the Isthmo-Colombian Area are distinct from those occurring in ancient states (i.e., Mesoamerica) at roughly the same time (Hoopes 2005: 2; Sheets 1992). The seemingly unique aspects of some of the material culture of northeast Honduras in Period VI does not prove that the region was autonomous, or without external cultural affiliation. I argue that we can best explain the intense regionalization of the archaeological record through a "Frontier" model that actually serves to complement the concept of an Isthmo-Colombian culture area.

Hoopes (2005:5) states, and my research corroborates, that the iconography of ceramics and stone sculpture especially suggest "widespread ideological traditions that

may share a common ancestry in a cultural horizon or religious complex." While it has recently been convincingly argued that the Isthmo-Colombian Area *is* a culture area with significant time depth (for example, Cooke 2005; Hoopes 2005; Hoopes and Fonseca 2003), there is no great time depth apparent for Pech (Chibchan-speaking) occupation in northeast Honduras. The archaeological record of northeast Honduras suggests that about A.D. 300, significant cultural (especially ceramic) changes took place. It is argued here that Chibchan-speaking groups, with a developed material culture repertoire and socio-political framework, migrated to northeast Honduras at this time from the south (Begley 1999; Cuddy 2007; Healy 1993). As groups to the west and northwest of northeast Honduras are not Chibchan-speakers, and have dramatically different cultural practices and material culture, there is little argument for the southerly expansion of Mesoamerican culture. The cultural linkages described suggest, instead, that the arrival of Chibchan-speaking groups into northeast Honduras are the result of cultural and territorial expansion outward, across time, from the Chibchan "core" of Costa Rica and western Panama.

Hoopes (2005) suggests that after A.D. 300, episodes of increasingly rapid social change, associated with demographic expansion, were taking place across the entire isthmus. I think it is reasonable to suggest that this demographic and territorial expansion ultimately resulted in the establishment of associated frontier regions throughout the Isthmo-Colombian Area, northeast Honduras being only one example. The "Frontier" model best explains why we see some unique cultural elements along the shifting peripheries of the Chibchan-speaking world, but many more similarities tying these frontier regions to the "core". It would also explain why the archaeological record of

northeast Honduras is more similar to that of the “core” and less similar than other frontier regions.

Further support for the “Frontier” model can be reviewed by examining how northeast Honduras interacted, socio-culturally, with both Isthmo-Colombian Area groups to the south and Mesoamerican groups to the north. As discussed throughout this chapter, archaeological evidence can be marshalled to show that northeast Honduras actively maintained associations with the Isthmo-Colombian Area. This is evinced through shared cultural norms in the production of material culture, architecture and settlement planning, and subsistence preferences. On the other hand, although in direct geographical contact with groups of the Mesoamerican southeast periphery, only selective Mesoamerican cultural elements are seen integrated into the material culture repertoire of northeast Honduras, especially in Period VI. In all cases, integrated aspects of Mesoamerican “influence” are heavily manipulated so that iconographic symbols and stylistic techniques are executed with an identifiable, diagnostic Northeast Honduran “branding”, effectually rendering any external ideo-social aspects moot in the reproduction or imitation of foreign styles.

Evidence for the movement of trade or exchange goods, into or out of northeast Honduras, is minimal in Period VI. Foreign items, occurring mainly at sites in the Bay Islands, are, relatively speaking, few and appear to be of Mesoamerican origin. This can perhaps best be explained by the location of these islands along major Atlantic trade routes between the two continents. It has yet to be discovered whether or not the indigenous population of northeast Honduras was directly involved in this coastal trade system in the centuries immediately preceding the arrival of the Europeans. It is plausible

that northeast Honduras was involved in the exchange of perishable goods (i.e., cacao, marine resources, raw lithics, etc.). I interpret the paucity of northern trade goods and identifiable Mesoamerican stylistic elements in northeast Honduras as evidence for a tightly controlled and selectively permeable Isthmo-Colombian cultural boundary. The paucity of southern trade goods in the archaeological record of northeast Honduras can best be explained as the result of a long-standing socio-cultural relationship with other regions of the Isthmo-Colombian Area, rather than an economic one. As we know precious little about the archaeology in the vast swath of territory between Costa Rica (the Chibchan-speaking "core") and northeast Honduras, it becomes extremely difficult, if not futile, to attempt a deeper examination at this stage.

In summary, northeast Honduras appears to have shared strong ideological, iconographic, and socially normative concepts with other regions of the Isthmo-Colombian Area, especially the "core". I argue that although increased material culture differentiation between the "core" and the frontier may give the appearance of autonomy, in some respects, this should be expected for cultures in a frontier setting. Geographical insularity explains the veneer of regionalization we see in northeast Honduras in Period VI.

Van Gijseghem's (2006) work led me to ask an additional question of this analysis: as frontiers and independent regions lay along a developmental continuum, do all frontiers eventually become independent regions? As suggested above, one way of determining where northeast Honduras falls on the continuum between integrated cultural frontier and independent cultural region is to place the threshold at some form of emergent ethnogenesis. Was northeast Honduras at a threshold? It is difficult to say at

this stage, for the Isthmo-Colombian Area. Many regions look as if they were headed in that direction, as a result of isolation and associated cultural fall-off across time. Archaeological evidence suggests that we are not witnessing this shift to autonomy (yet?) in northeast Honduras in Period VI. In fact, attempting to say where the region was headed, in terms of its developmental trajectory, might well be a futile endeavor akin to predicting a future that would never be.

Although it is probable that the Precolumbian isthmian peoples of Lower Central America did not conceive of themselves as belonging to a united "Isthmo-Colombian" nation, it seems likely that they may have viewed themselves as being part of some greater cultural network, defined by a shared linguistic heritage, ideological structure (i.e., animistic belief systems), symbols and icons (i.e., burial practices and avian "axe gods") and/or lifeways (including subsistence methods, architectural styles, material culture production, and/or normative social structure).

CHAPTER 6
SUMMARY AND CONCLUSIONS

Chapter 1 provided an overview of Precolumbian northeast Honduras. This archaeological region encapsulates a wide variety of eco-zones including lowland tropical rainforest, lagoon-estuary, dry pine savannah, and highland evergreen and deciduous forests. A definition of the boundaries of the region is also provided. We currently understand the region to have been occupied by indigenous Chibchan-speaking peoples at contact and perhaps as early as A.D. 300. Pech (Paya) populations are believed to have been the primary inhabitants of northeast Honduras and may have co-existed with neighbouring Sumu groups at the eastern extent of the region. There is almost no evidence of Mesoamerican language groups in northeast Honduras at Contact.

Chapter 2 examined the history of archaeological investigations in northeast Honduras. Archaeological research began there around the turn of the 20th century, with truly systematic archaeology beginning in the 1970s. Important researchers in the history of Northeast Honduran archaeology include: William Duncan Strong, Doris Stone, Jeremiah Epstein, Paul Healy, and Chris Begley. The chronology of northeast Honduras was introduced and discussed in detail. Some gaps exist in the chronology. The earliest Cuyamel period (1200-300 B.C.) reveals strong Mesoamerican connections; later Selin (A.D. 300-1000) and Cocal (A.D. 1000-1530) periods appear very different. The site of Río Claro was exclusively detailed as analysis of ceramics recovered from the site in the 1970s serve as one element of research for this thesis.

Chapter 3 provided an overview of the methodology used in the analysis of the Río Claro ceramics. A history of ceramic analyses, and rationale for conducting both a typological and modal analysis, was given. Finally, details of the steps taken in each

analysis were also discussed.

Chapter 4 detailed the results of paste, typological and modal analyses of the Río Claro ceramics (n = 325). Thin section analysis of several sherds aided in the identification of two distinct petrofabrics (Amphibolite and Feldspar) occurring in the Río Claro collection. This identification served to highlight certain aspects of pottery production, specifically that two distinct, primary clay sources were used throughout the entire occupational sequence at the site. Several new type-varieties and prominent modes were established and discussed.

The typology outlined in this chapter is one of the first full classifications of a ceramic collection from northeast Honduras, built largely on earlier, preliminary classifications (Epstein 1957; Healy 1993; Veliz et al. 1977). Definitional refinements, as well as the establishment of new varieties within existing types occurred for Dorina Abstract Incised Punctate and Concha Simple Incised ceramics. New types established in the present research include, Capiro Monochrome Incensario, Durango Cross-Hatch Incised Punctate, Salamá Plain, and Taujica Incised Punctate.

The modal analysis conducted in this research also represents the first attempt to create definitive modal categories, for the purpose of inter-regional comparison, from a Period VI site in northeast Honduras. Important modes were broken up into two broad categories: supports and handles. It was necessary to establish and define all support modes discussed in this chapter, as none have been thoroughly discussed in previous research. Many of the handle modes, on the other hand, were a refinement or elaboration of pre-existing modal classifications. “Revamped” handle modes include Serpent Head *adornos* (Begley 1999), “El Rey” lugs (Stone 1941), and Rider lugs (Strong 1935).

Chapter 5 addresses the primary research question: Was Precolumbian northeast Honduras the northernmost frontier of the Isthmo-Colombian Area in Period VI, or does the archaeological record indicate, instead, that it was an autonomous socio-political region? In order to address this question, it was necessary to discuss the Isthmo-Colombian Area (and earlier iterations). The concept of an Isthmo-Colombian Area is a recent redefinition of the Intermediate Area based on advances in our knowledge. This includes new evidence for shared linguistic and genetic traits, as well as evidence for shared material culture traditions and long-term continuous occupation in many regions. Accompanying this argument is a very recent hypothesis that late Precolumbian populations on the isthmus did not derive from late, northward migrations from South American but, rather, from *in situ* evolution of indigenous groups whose linguistic and territorial homeland was probably in southern Costa Rica and western Panama.

In order to address the research question outlined above I examined two models to explain the evidence from northeast Honduras. One model suggests that cultures of northeast Honduras were part of an autonomous socio-political entity, or "independent region"; the other model, by contrast, suggests that the region was part of an active northern frontier of the greater Isthmo-Colombian culture area. Assessing the viability of each of these models involved a review of extant archaeological and anthropological data for the entire Isthmo-Colombian Area in Period VI. Cultural features such as language, architecture and settlement planning, mortuary customs, subsistence practices, carved stone traditions, and ceramics were all examined.

It was argued that all Isthmo-Colombian Area groups, as well as those of northeast Honduras, were Chibchan-speakers in Precolumbian times (Constenla 1995).

Beyond shared language, groups of the Isthmo-Colombian Area (especially regions of Costa Rica) and northeast Honduras also shared overarching site planning and construction techniques involving similar site location strategies and the use of packed-earth, “longhouse” mounds, cobble facings, cobble “house-rings”, and cobble pathways. Other features, such as mortuary customs focusing on physical separation of the living from the dead through the use of independent cemeteries, as well as subsistence patterns dominated by root crop horticulture, were discussed as evidence for cultural connections.

Carved stone traditions of northeast Honduras were also compared with those of other, more southerly regions. It was demonstrated that northeast Honduras shares strikingly similar polished ground stone “axe-god”, hand pestle, mace head, and elaborate metate traditions with other regions of the Isthmo-Colombian Area, especially Costa Rica, in Period VI. I also suggest that gigantic and miniature metates from northeast Honduras may have served as regional icons or community identifiers. For example, metates of northeast Honduras might serve the same symbolic function as alter-ego statues from Pacific Nicaragua, or large stone spheres from the Diquís region of Costa Rica. Prominent Period VI ceramic modes from the site of Río Claro specifically, and northeast Honduras generally, exhibit similar, if not identical, forms and styles to those known from contemporaneous sites through much of Costa Rica and parts of Panama. Chapter 5 concludes with an evaluation of which model best fits with the evidence. It is determined that multiple lines of data point strongly to northeast Honduras being a frontier of the Isthmo-Colombian Area in Period VI, with only limited contact with Mesoamerican cultures further west.

One largely unstated goal of this thesis was to review and synthesize extant data

from throughout the Isthmo-Colombian Area from a multiscalar perspective. The process of contextualizing data in terms of nested levels of analysis is, I have found, extremely useful for critiquing the work of others and drawing my own interpretations based on the archaeological record. I began with an investigation of the Río Claro site, then moved on to evaluate the site within the northeast Honduras region, and finally the relationship of northeast Honduras to other regions in the Isthmo-Colombian Area. Having to contextualize, and recontextualized as I moved between different levels of analysis, increased my understanding of the entire Isthmo-Colombian past and enriched all of my interpretations.

There were a number of difficulties encountered while conducting this research. One was the lack of published evidence, and the overall lack of archaeological investigation within, and immediately surrounding, northeast Honduras. Published accounts were few, and often provided only brief descriptions and photographs of the most stunning or unique artifacts and sites. There remains a very serious gap for the crucial geographical zone between northeast Honduras and better studied parts of Costa Rica and Panama. Until this "transition zone" of Atlantic Nicaragua is studied in some detail, the proposed frontier model will remain difficult to prove.

Other important aspects of this thesis research that deserve special comment are the difficulties and advantages of dealing with pre-existing collections, including the previously excavated Río Claro collection and other museum collections from which many of my interpretations were drawn. I did not excavate or select the Río Claro collection of pottery sherds which served as the focus of this thesis. Obviously there is a detrimental loss of contextual information as a result. Had I been able to see all of the

original sherds I may have formulated different types of research questions, and the results would have certainly been different and far richer had I had this opportunity. However, the methods used by Paul Healy in the 1970s to record excavation and document observations on the collection itself were thorough. These quality records, coupled with secure radiocarbon dates and the ability to directly discuss those excavations with the principal excavator, allowed me to reconstruct excavations at Río Claro in an effective way. As such, I do not see working with this previously excavated collection as a limitation. In fact, I believe that working with the collection three decades later allowed me to understand many aspects (with the benefit of increased knowledge and informed reflection) that were not clearly understood in the 1970s.

Working with the Smithsonian Institute northeast Honduras collection was slightly more difficult. Again, the benefit of increased knowledge and hindsight allowed me to better understand many of the artifacts I examined there. However, the overall lack of context and records necessary to reconstruct William Duncan Strong's excavations greatly decreased the usefulness of that collection as a primary resource. As a secondary, supplemental resource it provided me the opportunity to view and handle a collection that contained whole vessels. This undeniably provided invaluable information and insight when interpreting the Río Claro sherds.

Finally, perhaps the sharpest criticism of my work is the argument that "pots are not people". Yet, most of what we know today about the ancient population of northeast Honduras is largely based on ceramics and their evolution over centuries of time. I have overcome this limitation by examining other classes of remains. An awareness of this limitation is currently the best I can offer, recognizing that more "dirt archaeology" in the

region is needed before a complete story can be told.

In sum, the evidence points to northeast Honduras as an active frontier of the Isthmo-Colombian Area in Period VI. My argument for connection is based on a suite of specific cultural traits, including language, ceramic modes, and carved stone traditions, as well as more general shared traits, such as subsistence patterns, mortuary customs, and architecture and settlement planning. This unique region appears to have been resistant to Mesoamerican influence to a great degree for most of its prehistory. Furthermore, based on its ceramic iconography, northeast Honduras had symbolic ties to other regions of the Isthmo-Colombian Area, especially its “core” which includes Atlantic Watershed, Central Highland, and Diquís regions of Costa Rica, and the Chiriquí region of western Panama.

Appendix A

Río Claro (H-CN-12) Ceramic Data Sheet

Catalogue #: _____ **Provenience: _____**

Photo #: _____ **Drawing #: _____**

***PASTE WARE*:**

Paste Colour: _____ **Hardness: _____**

Inclusion Types/Relative Frequency: _____

Inclusion Size (range): _____ **Inclusion Abundance: _____**

Texture: _____ **Firing: _____**

***TYPE*:** ***VARIETY*:**

Vessel Portion: rim neck body base other: _____

Vessel Form: plate dish bowl jar vase other: _____

Thickness (avg.): _____ Rim Type: _____ Lip Type: _____

Base Type: _____ Rim or Orifice Diameter/Arc: _____

Decoration: _____

Surface Finish: _____ **Illustration: Attached** ☐

***MODE*:**

Appendage Type: handle lug adorno support other: _____

Form: tapered conical tubular other: _____ hollow or solid

Measurements (length): _____ (width):_____

Decoration: _____

Application: Scar Evident ☐ **or Attached** ☐ **Illustration: Attached** ☐

NOTES:

Appendix B

Rio Claro (H-CN-12), Northeast Honduras: Petrographic Analysis

Prepared for Dr. Paul F. Healy by Dr. Kay S. Sunahara

Please note the following petrofabric descriptions are descriptions of the two broad groups I have observed in the five samples. Proper petrofabric "definitions" that formally outline groupings observed in an entire assemblage would require a particular and explicitly outlined sampling strategy including a large sample size. This being said, here are the descriptions for the two groups.

Petrofabric 1

Fired clay matrix containing:

10-15% amphibolite, strong pleochroism brown to yellow-green (possibly hornblende), round to sub-round, moderately sorted, mode grainsize diameter of 0.2mm and maximum diameter of 1.0mm.

3-5% quartz with undulose extinction, some polycrystalline grains, some grains with visible fluid inclusions, round to sub-round, poor to moderately sorted, mode grainsize diameter of 0.75 mm to a maximum diameter of 2.0mm.

3-5% opaque inclusions, likely hematite due to brown-red colouration, round to well-rounded, moderately sorted, mode grainsize diameter of 0.2mm to a maximum of 0.3mm.

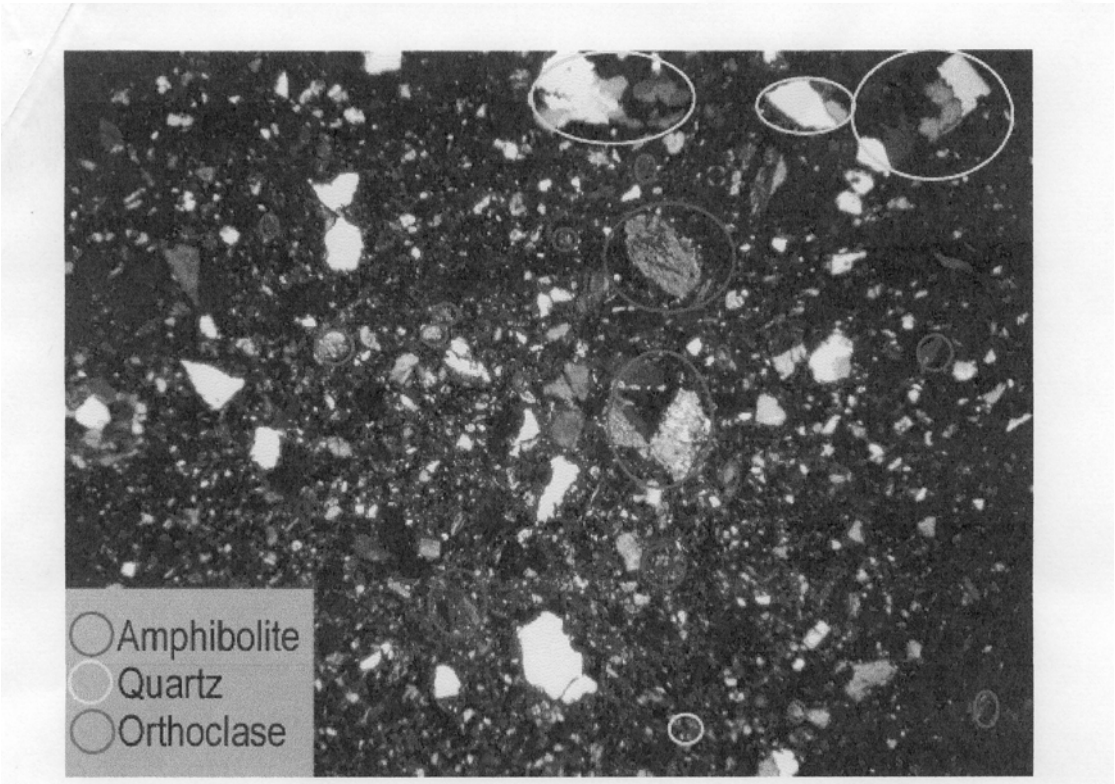
2-4% plagioclase feldspar, sub-round, moderately sorted, mode grainsize diameter of 0.25mm to a maximum diameter of 0.75mm.

2-3% orthoclase feldspar, sub-round, moderately sorted, mode grainsize diameter of 0.5mm to a maximum diameter of 1.25mm.

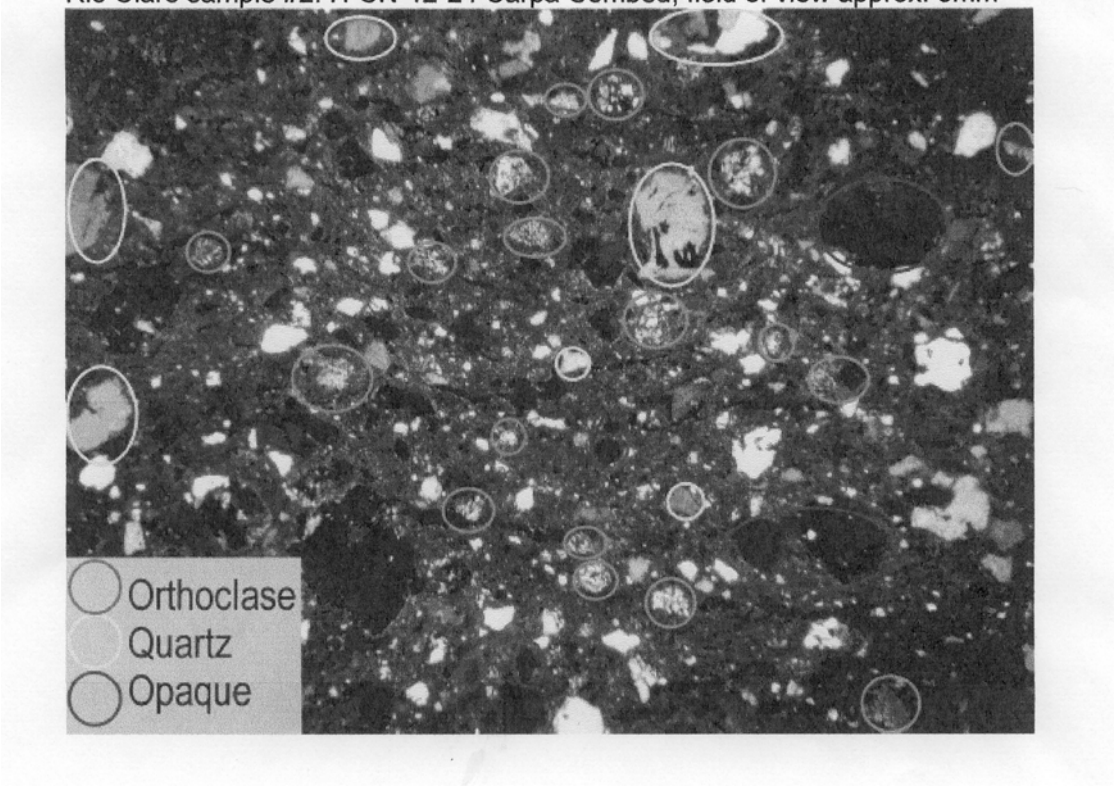
1-2% biotite mica, sub-round, moderately sorted, mode grainsize diameter of 0.25 mm to a maximum diameter of 0.5mm.

As seen above, this petrofabric is characterized by the striking abundance of amphibolite which, based on its colouration could be hornblende. Hornblende, a mineral in the amphibole group, cannot always be identified from other types of amphibole from observation of optical properties. As a result, though hornblende is common and occurs in a wide range of igneous and metamorphic rocks, it is more accurate to describe what we see here as amphibolite. This petrofabric was found in samples #1. H-CN-12-109 Dorina Abstract incised punctate as well as sample #5. H-CN-12-100 Concha Simple incised punctate.

Rio Claro sample #1. H-CN-12-109 Dorina Abstract incised, field of view approx. 3mm



Rio Claro sample #2. H-CN-12-24 Carpa Combed, field of view approx. 3mm



Petrofabric 2

Fired clay matrix containing:

8-9% orthoclase, sub-round, poorly sorted, mode grainsize of 0.3mm to a maxium of 3.0mm

7% quartz, undulose extinction, some polycrystalline grains, sub-round, mode grainsize diameter of 0.25mm to a maximum diameter of 1.0mm. The occasion occurrence of trace amounts (1% or less) of quartz with fluid inclusions displaying radially oriented growth in a chert-like in habit.

3% opaque inclusions likely hematite or magnatite, black to dark brown colour, well-rounded, poorly sorted, mode grainsize of 0.2mm to a maximum of 1.0mm

1% amphibolite, sub-rounded and moderately sorted with a mode grainsize of 0.2mm to a maximum grainsize of 0.4mm

1% to trace quantities of biotite mica, sub-rounded, moderately sorted, mode grainsize of 0.25mm to a maximum of 0.3mm.

1% to trace quantitites of plagioclase feldspar, sub-round, generally well sorted, mode grainsize of 0.2mm to a maximum of 0.25mm.

One sample contained the rare occurrence of a single grain of perthitic feldspar embedded in a grain of polycrystalline quartz.

Petrofabric 2 is distinguished by the quantities of orthoclase feldspar and quartz. Amphibolite (possibly hornblende) does occur, as in the first petrofabric described, but in significantly lower abundance and generally smaller grainsize so that it is simple to distinguish between the two petrofabrics. Sample #2. H-CN-12-24 Carpa Combed, #3. H-CN-12-120 San Antonio carved and #4. H-CN-12-66 Dorina Abstract incised punctate were identified with petrofabric 2.

General Notes:

I had wanted to comment further on the possible origins of these petrofabrics but after consultation with Robert Mason over maps of the area and surrounding regions I have concluded that on the ground raw materials sourcing would be required to get a handle on the local geology and nature of material deposits. Additionally, a larger sample size of thin sections is generally desireable to formalize these petrofabric descriptions into petrofabric definitions for the site of Rio Claro.

Judging from the generally sub-rounded to rounded granulometry of the mineral inclusions I would suggest the we are looking for sands or clays weathered out of volcanic or metamorphic rocks rather than purposeful grinding of tempering agents from such rocks. The two distinct but not altogether unrelated petrofabrics (they share similar minerals but in very different proportions) indicates at least two different clay/sand sources.

Overall, there is a distinct lack of sedimentary rocks which I understand to be the bedrock of the area. I would venture to guess that there are convenient deposits of sand and/or clays bearing these minerals as alluvial deposits along the banks the Rio Claro and Rio Aguan. This makes sense as the Rio Aguan traverses various volcanic and metamorphic formations on its way to the Caribbean Sea. A walk along the now dry banks of the Rio Claro might reveal much in this regard. If local alluvially borne deposits are not found the search should move further upstream.

Appendix C

Total Sherd Counts for the Río Claro Typological Classification

Type	Variety	Total Sherd Count
Capiro Monochrome Incensario		
	Capiro	20
	Calentura	14
Carpá Combed		
	Undetermined	9
Concha Simple Incised Punctate		
	Concha	25
	Zamora	5
	Limpia	6
Dorina Abstract Incised Punctate		
	Dorina	42
	Castilla	17
	Tarros	8
	Arena	14
Durango Cross-Hatch Incised Punctate		
	Durango	10
	Undetermined	8
Salamá Plain		
	Salamá	19
	La Brea	15
San Antonio Carved		
	Undetermined	11
Taujica Incised Punctate		
	Taujica	3
TOTAL VESSEL SHERDS (n)		226

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