
21 **COMMONER CHOICE: NEW INSIGHTS INTO HOUSEHOLD PRODUCTION STRATEGIES DURING THE LATE POSTCLASSIC TO EARLY COLONIAL TRANSITION AT LAMANAI, BELIZE**

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In the Maya area, reliance on Spanish colonial documents has hindered understanding of local producers and communities and encouraged limited views of pre-Columbian commoner households. Current investigations at Lamanai have focused on how commoners actively participate in the process of culture change. Specifically, how they organized household production and gendered relations in response to the demands of the Spanish State. Analysis of multiple lines of archaeological materials suggests that households were responding with a number of different strategies. In this paper I will discuss these findings and endeavor to reconstruct the gendered relations of production involved in the preparation and procurement of animal resources from commoner household contexts at Lamanai during the Late Postclassic-Colonial transition.

Introduction

Most current discussions of ancient Maya society assume an opposition of commoner and elite classes that arises less from archaeological information than from Euro-American notions of contrast between urban and rural populations. Commoners are theorized as largely homogeneous, unchanging, and predictable socio-economic entities that are unable to participate in actively shaping complexity (e.g., Netting 1993; Robin 1999). Consequently, during times of political change Maya commoners are portrayed as being little affected because their household organization is focused on utilitarian and agricultural production which allows them to revert easily to self-sufficiency. As a result many Maya archaeologists under-emphasize the role of commoners in society (see discussions by Brumfiel 1992; Marcus 1995; Robin 1999).

Maya archaeologists' views have further been complicated by the survival of traditional Maya agrarian communities into the 20th century despite Spanish colonization. This has provided a foundation for analogical arguments that deny change through time, supporting the assumption that the condition of Maya commoners is

diachronically consistent (e.g., Farriss 1984; Restall 1997). Furthermore, reliance on Spanish colonial documents has hindered understanding of local producers and communities and encouraged limited views of Pre-Columbian commoner households. Depending on our view of the role of commoners and how they were articulated into Maya society in ancient times greatly influences our views of the impact of the Spanish state on their lives. Spanish colonization was a catalyst for change in other indigenous societies and it had profound effects on household organization, particularly the gender relations of production (e.g., Silverblatt 1987).

As one of the few known locations of Maya/Spanish interaction in the southern lowlands, the site of Lamanai provides an excellent opportunity to identify and test current theoretical assumptions of the relative autonomy among "commoner" social echelons during times of political change. Research by Darcy Wiewall has focused on understanding how Maya commoner households in the community of Lamanai organized production and consumption in response to the Spanish state during the transition from Late Postclassic to

Spanish Colonial Periods. Based on previous Late Postclassic excavations in the southern Maya lowlands and ethnohistorical data Wiewall developed a set of eight temporally specific archaeological correlates to distinguish a Late Postclassic from a Colonial house lot and thereby the extent of changes in household organization, production, and consumption strategies.

Before turning to a discussion of the excavation data, it is necessary to first provide background information about several important aspects of the research. First, we discuss gender as an organizing principle and how households are a relevant unit of analysis for understanding gender relations in ancient Maya society. We then review data from Postclassic and Spanish colonial literature to evaluate what they tell us about how household production was organized. Next, we offer a brief outline of the types of tribute collected by the Spanish and how these demands may have affected the organization of Maya commoner household production, specifically their effects on gender relations. And last, we endeavor to reconstruct the gendered relations of production involved in preparation and procurement of animal resources from commoner household contexts at Lamanai during the Late Postclassic-Colonial transition. We attempt to people the past, by providing a holistic view of Maya gender relations of production that includes all potential actors who contributed labor to the household: men, women, children, and elders. We acknowledge that these suggestions are far from demonstrated explanations. Nevertheless, these working inferences offer prospective insights on how households, and the people, who comprised them, responded to Spanish colonial policies.

The Concept of Gender as an Organizing Principle of the Household

As a primary structuring principle, gender shapes relations of power and therefore sets parameters and establishes certain 'rules' for the enactment of daily life sex (e.g., Conkey and Gero 1991). However, in many gender archaeological studies we can see remnants of sexual division of labor studies in that the man/woman gender category has simply replaced the male/female sex category. As a result gender, originally problematized as a cultural construct, has become 'naturalized' and fails to conceptualize gender as a multiple, fluid and transmutable category. The focus on man/woman binary categories has obscured researchers' abilities to recognize other gender categories, such as children and elders. From cross-cultural research we know that gender is not always constructed as binary oppositions, nor is the Euro-American view of man/masculine opposed to woman/feminine the same in all cultures. Prior to colonization, many kinship societies had two genders, derived from the sexes, but not all. In some societies, gender develops and is modified through the course of a lifetime. Depending on when a culture determines the onset and termination of reproductive activity, children may be considered a separate gender, "those who cannot reproduce," or sexually neutral, until adolescence. Adults may experience transformations in their gender definition as they reach that period in life where they are supposed to end engagement in reproduction or their reproductive powers decline (Gailey 1987:34-38). So not only does gender change through the course of one's lifetime, the roles and responsibilities of the individual may also change.

Our androcentric view of children and elders as non-productive individuals has obscured their economic contribution to past societies. There is considerable evidence that in most prehistoric populations at least half of the living individuals in any given

community were children (defined here as people under the age of 18 years) and many individuals lived past the age of 50 (Chamberlain 1997:249). Cross-culturally we know that the labor of children and elders is important to household production. In order to move beyond the impasse of binary man/woman categories, we must take into consideration the possibilities of other genders and how they may have been critical to household provisioning. Gender, then, can be viewed as a culturally constructed ideology, that structures the roles and relationships of all actors—women, men, children and elders—their access to resources, appropriate roles in production, and opportunities for resource control both within the household and in society as a whole (e.g., Conkey and Gero 1991; Gailey 1987; Yanagisako 1979). Understanding gender, therefore, is critical to understanding the organization of past household activities and their gendered relations of production.

Households, as an elemental social unit, reflects and reinforces these underlying conceptual structures of society and by extension the arena in which gender relations are constructed and negotiated (Ashmore and Wilk 1988). A household can be defined as a co-residential group composed of various actors wherein membership is defined by shared domestic and economic activities regardless of whether its members are linked by kinship or marriage (e.g., Ashmore and Wilk 1988). Households are a relevant level of analysis for examining social change, for it is within these groups that basic needs are met and social roles defined (Wilk and Netting 1984). In all societies, households produce goods for their own consumption and for social exchange. What each household is capable of producing is dependent on its access to resources such as farmland, labor, technology, and forest products (Netting

1993; Wilk and Netting 1984). It is within this social space that actions and behaviors are continually reorganized on short and long-term bases. The arrangement of these different behaviors and economic tactics comprise the overall adaptive strategy of the household (Wilk 1991). During times of political change, households will select the best risk-reducing socioeconomic strategies in order to survive, thereby altering the activities of the members of the household and their gendered roles of production (Wilk 1991; Yanagisako 1979). In the process existing gender hierarchies may be intensified or new ones imposed (Gailey 1987). Thereby, household organization affects and is affected by relationships beyond the household.

Defining Lowland Maya Commoner Household Production

Before we can delve into addressing the impact of Spanish colonial institutions on Maya commoner households, we must first identify what we know about how household production was organized in the Maya Lowlands. I review data from the Postclassic codices and Spanish colonial literature most closely related spatially (northern Lowland Maya area) and temporally (Late Postclassic-Early Colonial) to evaluate what they tell us about household production in Postclassic Maya society. The purpose of this overview is to elucidate a baseline to discuss what areas of household production may have been most impacted by the imposition of Spanish institutions.

Postclassic Maya Codices

Codices serve as templates that guide appropriate social behavior and gender roles and therefore, provide the opportunity to examine how gendered roles of production were conceptualized in Postclassic Maya culture. We focus our review of Postclassic

Maya codices on the Madrid Codex because it depicts a range of behaviors and activities associated with household production. The majority of illustrations in the codex involve one or more deity figures, which are engaged in various activities such as hunting, trapping, planting, tending bees, and making offerings. Of these, female deities are engaged in various activities linked to marriage or sexual encounters, spinning and serving as the bearers of burdens and auguries associated with marriage and conception. On the other hand, male deities are linked to agriculture, trapping, hunting, and crafting deity masks and images. Interestingly both male and female deities are seen participating in activities related to beekeeping, making offerings, bloodletting, and weaving (Vail and Stone 2002:221). According to Vail and Stone's (2002) analysis of the codex, Maya women were broadly divided into two age-based categories: pre-menopausal women and grandmother figures. Weaving is typically done by old women, whereas burdens or auguries are associated with young women. This suggests that certain activities were related to age (Vail and Stone 2002:211).

Ethno historical Data

Early colonial censuses identify that the basic social unit in the northern Maya Lowlands was a multiple-family household living in a residential compound (Roys 1957:155; Roys et al. 1940:14). Household members produced goods primarily for their own consumption, but also for barter and payment of tribute (Tozzer 1941:23, 97). Tribute payments commonly consisted of wild game, turkeys, fish, salt, maize, beans, chile, honey, fruits, and cotton cloth and thread (Roys 1957). A variety of plants were grown in adjacent or nearby agricultural fields (*milpas*) and house gardens located in the residential compound provided

additional fruits and vegetables (Tozzer 1941:89, 195, 196, 198). The residential compound was also where a variety of fowl, sting-less bees, which were source of honey and wax, and possibly deer and peccary were raised (Tozzer 1941:127, 201). According to Landa, the daily life of the Maya household was characterized by a well-defined division of labor, with men's activities focused on the milpa, hunting, and fishing, and women's activities focused on food preparation, textile production, house gardens, animal husbandry, and the care of their homes, and children. Both men and women had control over the products of their labor, selling these items at the market (Tozzer 1941:96, 127). He pointed out the reciprocity of labor in many aspects of household production activities, such as agriculture, hunting, fishing, salt gathering, weaving and spinning (Tozzer 1941:87, 96, 97, 127). These cooperative production activities were commonly divided by gender into a group of women or a group of men working together at their respective tasks; however, in some cases work was done on a community level and both men and women worked together (Tozzer 1941:87, 96, 97, 127).

Restall's (1997) investigations of colonial-period wills and testaments (ca. 1646-1813) provide a separate line of evidence for the gendered division of household production. Many inheritance items are gender specific, either being bequeathed to men or women. Maya men bequeathed agricultural land to their sons and all tools relating to agricultural production were willed to men without exception (Restall 1997:124-130). The property that women bequeathed or inherited was focused on the residential compound, or house plot. Men owned the orchards, trees, and vegetable gardens, but they left such property to wives, daughters, or both, and women were two times more

likely to bequeath a house plot in a will (Restall 1997:124-130). Likewise, the majority of bequeaths of beehives went to wives and daughters (Restall 1997:124-130). Items related to textile production, pigs and fowl appear in women's wills and are not mentioned in men's wills (Restall 1997:129).

Discussion of the data

In sum, there are four underlying themes that are present in all three sources. First, a fairly well-defined spatial division of labor between women and men characterized the daily life of the household with men more likely to work away from the household, maintaining milpa, whereas Maya women tended to work within the confines of the domestic sphere. Second, even with this spatial division many activity spheres were not restricted to either gender. In some cases both men and women could, and did, participate in activities together and many economic activities were shared among the members of the community. Furthermore, both women and men had control over the products of their labor, selling these items at the market and bequeathing these items to individuals of their choice. And last, according to these sources only the productive labor of women and men were important to household provisioning. With the exception of the Madrid codex, the productive labor of children and elders are not discussed.

We should keep in mind the inherent biases of the sources. First, it is doubtful that the ethnohistorical documents fully portray the realities of daily life from a commoner perspective and even less about lives of women, children and elders. The Madrid codex is presumed to have been written by Maya male elites and we know that Landa and his Maya informants were male members of an elite class. This elite-male position must have had some influence on

their perspectives on the roles of Maya commoners indicating these depictions may not be either accurate or complete. The basic assumptions regarding the roles of Maya women and men in household production can be seen as either idealized societal roles and expectations, or reflections and constructions of 16th century Spanish Catholicism (Silverblatt 1987). The information drawn from wills and testaments dates to a period one hundred years after conquest providing at least two generations of time during which Spanish patriarchal inheritance patterns undermined traditional patterns of inheritance. Therefore, we should not assume that Spanish males perceptions of Maya gender relations are factual, nor should we assume that gender relations in contemporary Maya communities are remnants of a pre-Columbian past, but rather it should be considered a problem or a feature of social structure yet to be explained.

Changes Imposed on Maya Household by the Spanish State and Catholic Church

The central feature of Spanish colonial rule was incorporation of subordinate indigenous people into a world economic system. The Spanish *encomenderos* quickly determined (in order of economic importance) that cotton-related goods, beeswax, honey, salt, and domestic animals were the products by which they could produce profits and accumulate wealth. Both the Spanish state and Catholic Church imposed new institutions on the Maya household incorporating existing pre-Columbian tribute and labor systems into three new tribute-based policies—*encomienda*, ecclesiastical taxation, and *repartimiento*—that appropriated goods and labor (Cook and Borah 1974:9; Patch 1993:28).

Ethnohistoric data suggested three factors affected Maya household

organization and gender relations of production. First, the colonial tribute economy was based on legal and illegal systems of taxation that revolved around agriculture, animal husbandry, and textile production at the household level. In 1549, the first definition of a full-tributary was defined as a married couple. By 1583 the definition of a tributary changed and now defined all unmarried women between the ages of 12-60 and unmarried men between the ages of 14-60, as half-tributaries (Cook and Borah 1974:10n26, 11; Patch 1993:28). Annual taxes owed by both full- and half-tributaries in Colonial Yucatan in 1583 are shown in Table 1. Second, Spanish tribute requirements for native and non-native products, such as chickens and specific types of cotton-cloth and thread suggest further changes in the allocation of labor, production and consumption activities. And last, while the agricultural surplus of Maya men mainly fed local Spaniards, Maya women's cloth-related goods, domestic animals, honey, and beeswax products supported the Spanish export market.

The post-conquest mode of production may have remained familiar, but the amount and types of tribute demanded, and its ultimate use, was unprecedented. The imposition of multiple political-economic policies raises several questions about the Spanish State's role in shaping the organization of household production, and consequently, creating new gender relations of production. Specifically, Maya households had to increase agricultural production (corn, beans, and cotton), animal domestication and procurement (sting-less bees, chicken, and fish) and cloth-related goods (mantas and thread). They had to determine how best to reorganize and reallocate labor in order to increase production, possibly extending work time, increasing the size of the labor pool, specializing productive activities, or altering

gendered relations of production. The inclusion of teenagers and elderly adults as half-tributaries influenced changes in the traditional gender relations of production between women, men, teenagers, and elder adults. And last, the Colonial administration dealt directly with Maya men, whether to collect taxes or arrange contracts for the control of women's labor and their products.

Consumption, Production and Organization of Lamanai Households

In the Late Postclassic period the community of Lamanai was a small, but flourishing political and economic polity in the southern Maya lowlands. Circa 1546, the community was incorporated into the *encomienda* system, which required individual households to pay specified amounts of traditional and non-traditional goods (Jones 1989). Early research led by David Pendergast focused on identifying the material culture of Spanish acculturation and syncretism through architecture and material goods in elite residential and communal spaces (Pendergast 1991). With the exception of the construction of two Christian churches, he found little evidence of acculturation in the community. Continuity was, in fact, by and large the norm in all aspects of material culture. This research, however, did not focus on non-elite households, nor did it address the increased demands by the Spanish state for local products.

Wiewall's research focused on excavation of commoner residential areas that specifically targeted the variations in local production and consumption strategies through multiple lines of archaeological material. The following section integrates several avenues of evidence in order to attempt to reconstruct the gendered relations of production involved in preparation and procurement of animal resources from commoner contexts at Lamanai during the Late Postclassic-Colonial transition.

**TABLE 1: ANNUAL TAXES OWED BY A INDIAN FAMILY
IN COLONIAL YUCATÁN 1583 (IN REALES)**

<u>CIVIL</u>		<u>ECCLESIASTICAL</u>	
Tribute per full-tributary	18	<i>Obvención mayor</i> (males)	12 ½
One-half cotton manta ^a		<i>Obvención mayor</i> (females)	9
One Fanega maize ^b		(Cotton mantas, thread, salt, wax chickens, beans, chile, honey)	
Two Chickens			
One Turkey		Doctrina (one egg & one jar oil)	8
		<i>Obvenciones menores</i>	
		Baptisms (@ 3 reales)	
		Confirmations (@ 8 reales)	
		Weddings (@ 10 reales)	
		Matrimonial Inquires (@ 4 reales)	
		Burials, adult (@ 8-20 reales)	
		Burials, infant (@ 4 reales)	
		Testamentos (@ 4 reales)	
		Annual Average	5 ^c
Total	18	Total	34 ½
Total Taxes Owed		52½ reales (8 reales = 1 peso)	

From Cook and Borah 1974:10; Farriss 1984:Table 1.1; Patch 1993:28. ^aOne manta equals approx. 10 sq. yards. ^bOne fanega equals 11 kgs. ^cBased on averaged lifetime of an Indian couple with three surviving children and three dying in infancy. An average over a 20 year period of one wedding with matrimonial inquiries, six baptisms, three confirmations, and two adult burials with testamentos for the couples parents (Farriss 1984:41).

We do not attempt to apply direct gender attributes to individual tool remains, but instead we explore who may have produced these tools and participated in these activities. It is important to note that these analyses remain ongoing. Nonetheless, we offer the following provisional thoughts

on developments at Lamanai during this transitional phase.

Consumption

House lot excavations associated with four structures resulted in the recovery of greater than 7,000 faunal remains. Here we discuss only the results of the analysis of

5,000 bone and shell specimens from contexts assessed as midden deposits (Table 2). All of the midden deposits contain artifacts suggestive of dates ranging from the Late Postclassic through the Early Colonial transition period. Thus, this large faunal assemblage provides us with an opportunity to address some of the questions raised earlier with regard to the impact of Spanish arrival. We anticipated that there would be a decrease in the diversity of ecozones being exploited with a focus on resources from cultivated land and riverine zones. There should be a decrease in large mammals associated with secondary and canopy forest with a simultaneous increase in the importance of fish, birds, and turtles (Emery 1999). In addition, there should be evidence of the introduction of Old World species of animals, such as pigs and chickens, and a substantial increase in turkey, chicken and fish because these were three items required by each household as tribute payment.

It is abundantly clear that a pattern of faunal exploitation focused on the increasing utilization of lagoon and river species, as initially documented by Emery (1999), is present throughout the Postclassic period and continues into at least Early Colonial times. Briefly, this pattern can be characterized as one focused on the procurement of lagoon turtle and fish species. More than 96% of all identified specimens are representative of vertebrate and invertebrate species that inhabit the lagoon or nearby rivers and ponds. Turtles dominate the sample and, more specifically, the Central American river turtle (*Dermatemys mawii*) is the dominant species in the assemblage. Carapace and plastron fragments from this species account for more than 87% of all identified specimens and over 50% of the entire faunal assemblage. At least three other local turtle

species are also present though in far fewer numbers.

Fish species identified include both the bay snook and blue catfish, both found in the New River lagoon and surrounding waterways today. Pemolodid catfish and jack fish are also present and, although the presence of jack fish is suggestive of coastal exploitation, jack fish are known to travel several kilometers up the New River today. Other species inhabiting the lagoon and nearby waterways include at least four species of shellfish, namely *jute*, apple snails and freshwater clams.

It should be noted that there were greater quantities of fish and mollusks observed during excavation of the midden deposits, however, the preservation was very poor and the bone and shell remains disintegrated during recovery. This is in sharp contrast to the excellent preservation overall of the faunal material. We return to what these observations may imply below in the section on production. Of interest, crocodile remains were also identified and used as a food source.

Although lagoon and river species dominate the sample, there are also a number of larger mammal species present including white-tailed deer, peccaries, and tapir. Smaller mammal species represented include dog, paca, and armadillo, which appear to increase in importance, but are not exploited in large numbers. Birds are also present but in fewer numbers and, unfortunately, many of the long bone specimens examined were too fragmented to permit secure identification of species. However, some turkey was noted but we are unable to determine if these are bones from the wild ocellated turkey or from domesticated turkey. The majority of the bird long bone fragments appear to be from medium to large sized species such as turkey.

Table 2: Distribution of Identified Taxa by Structure/Feature

Taxon	Str. N12- 4	Feat. N25/E50	Feat. N350/E40	Feat. N425/E10	Total
Turbinella angulata	-	-	1	1	2
Cassis tuberosa	-	1	-	-	1
<i>Citarrium pica</i>	1	-	-	-	1
<i>Pachychilus glaphyrus</i>	2	14	3	4	23
<i>Pachychilus indiorum</i>	3	1	-	3	7
<i>Pomacea flagellata</i>	2	10	1	7	20
<i>Nephronaias</i> sp.	1	4	-	1	6
Family Ariidae	-	1	-	-	1
Family Carangidae	-	5	-	-	5
Ictalurus furcatus	-	2	1	1	4
<i>Petenia splendida</i>	2	27	1	14	44
Class Anthozoa	-	1	-	-	1
<i>Crocodylus</i> sp.	1	11	-	10	22
Dermatemys mawii	111	1,800	115	329	2,355
<i>Staurotypus triporcatus</i>	4	32	2	24	62
<i>Trachemys scripta</i>	-	29	15	13	57
Family Chelonidae	1	-	-	-	1
Agouti paca	1	-	-	-	1
<i>Canis familiaris</i>	3	-	-	7	10
<i>Dasypus novemcinctus</i>	5	6	-	1	12
<i>Equus caballus</i>	-	-	-	12	12
<i>Homo sapiens sapiens</i>	1	-	4	-	5
<i>Odocoileus virginianus</i>	5	15	4	2	26
Family Cervidae	4	6	-	1	11
Sus scrofa	-	1	-	-	1
<i>Tapirus bairdii</i>	-	1	-	-	1
Family Tayassuidae	3	4	-	-	7
Orthogeomys hispidus	1	-	-	-	1
<i>Meleagris</i> sp.	-	-	2	-	2
Total	151	1,971	149	430	2,701

With the above information in hand there are a few general observations that we can offer about the exploitation of animals at Lamanai during the Late Postclassic to Early Colonial transition at the household level. The data do not suggest any major changes in animal procurement patterns from the Postclassic into the Colonial period. On the contrary there simply appears to be a continued if not greater focus on local lagoon and river species.

Overall there appears to be a greater number of smaller to medium sized mammal species being exploited, even as locally available terrestrial games are present. There is no direct evidence of Spanish influence as anticipated. Most interesting is the overall lack of bird in the deposits, particular, the absence of domestic chicken (*Gallus gallus*). This is in sharp contrast to how quickly households in northern Yucatan integrated chicken into the domestic unit, as thousands of chickens were collected as tribute within just two years of the Spanish requiring poultry as a tribute item (Cook and Borah 1974:10). However, the increase in fish consumption during this time period may be indirect evidence of Spanish influence. Fish consumption clearly increased during this time period, implying that even if quantities of fish were leaving Lamanai as tribute, quite a substantial amount was being kept for local consumption.

Procurement and Production

Cooking vessels, net sinkers, and projectile points are material correlates of cooking, fishing, and hunting, and thereby can be taken indirectly as indices of production related to procurement and preparation of animal resources. Ethnohistoric and ethnographic sources identify the comal and the cooking pot as the two basic cooking vessels present in households. These different vessel types produce different dishes: tortillas on the one

hand; soup, stew, and beans on the other. Differing ratios of these vessel types can inform us of changes in patterns of food preparation and work schedules. Cooking vessels are represented in the sample by the rims of all types of thin to medium-walled, short-neck jars, as well as, specimens that bear exterior soot deposits and interior surface pitting. Yglesias Phase utilitarian cooking jars and shallow dish/bowls in a range of sizes are the primary components of the assemblage to the exclusion of comals (Graham 1987:91). Cooking vessels produce labor-saving “one-pot” meals typically composed of vegetable, bean, deer, wild game and/or and fish stews (Gann 1918:22, 27; Tozzer 1941:91). As noted earlier, in many instances fish bone and mollusk shell were poorly preserved in midden deposits. This coincides well with food that has been boiled and prepared for soups and stews. In addition, there were discrete assemblages of fish bones or shells observed during excavation which were inferred as the dumping of the remains of a one-pot meal. These lines of evidence suggest that one-pot meals of fish or shellfish stews may have been a preferred food item and method of preparation.

Line fishing and cast nets would have been the two most common procurement techniques, though pot fishery and seine nets were also probably used (Gann 1918:25; Tozzer 1941:156,190). Net sinkers used to weight fishing lines and nets illustrate evidence of fishing technology. Pendergast noted that in the Postclassic period, standardized, fired-clay, ball net sinkers replaced the Classic period notched, reused pottery sherds (David Pendergast, personal communication, 2003). We anticipated that standardized net sinkers would increase since tools related to fishing technologies should increase as the Spanish demand for fish increased. Interestingly this is not the case. Notched, reused pottery

sherds are dominant to almost the exclusion of fired-clay ball net sinkers.

Ethnohistoric documents also tell us that fish, turtle and birds were speared, harpooned, and shot with bow and arrows (Gann 1918:25; Tozzer 1941:190, 202). Based on previous excavation at Lamanai and Tipu a decrease in lithic tool diversity and material, specifically a decrease in obsidian, and an increase in projectile points and non-formal tools made on local materials was anticipated (Graham 1991). Small side-notched projectile (SSNP) points and informal flake tools comprise 86% of the total lithic assemblage. Unifacial and bifacial projectile points range in sizes between 20-42 mm in total length and are manufactured on chert and chalcedony biface thinning flakes, many of which appear to have been recycled. There is a high degree of variability present in the overall forms of SSNP points. Only two obsidian SSNP were recovered and these are less than 35 mm in total length and manufactured on recycled blades. A high number of SSNP points were broken during manufacture as a result of inclusions in the material and use of excessive force during flake removal. Many cores and primary and secondary reduction flakes exhibit step/hinge flake terminations.

Household Organization

In Maya households, women are regularly associated with the preparation of food. In our assemblages, cooking pots are the focus of food preparation to the exclusion of comals. These vessels produce labor-saving “one-pot” meals while comals are used for more labor-intensive foods. Comals are linked to the time consuming activities related to maize processing and tortilla preparation (Boremans 1998; Brumfiel 1991). The absence of comals implies that this labor consuming activity was prohibitive. It further indicates that their

time was being reallocated into more productive arenas, possibly toward an increase in the production of textiles or other tribute items required by the Spanish. While cooking is attributed to adult women, ethnographic documents tell us that by age seven or eight young girls assist their mothers in food preparation (Boremans 1998:81). The ease of preparing stews could have been easily allocated to young girls and elder women.

Hunting and trapping of large game is a productive activity regularly associated as with adult Maya men (Gann 1918: 24-25; Tozzer 1941:31). Throughout the year, deer frequent the milpa margins, as such; this activity was easily embedded into the daily round of men going to and from the milpa. However, young boys were responsible for catching small mammals in snare traps and cages (Gann 1918:25; Tozzer 1941:191, 204), a pursuit that today often provides the only meat a family receives for several days (Hovey and Rissolo 1999). Boys also used slings to hunt squirrels, birds, and other small mammals (Gann 1918:25). Furthermore, the boys also prepare and cook these animals (Hovey and Rissolo 1999). So while hunting is attributed to adult men, and cooking is attributed to adult women, here we have young boys responsible for the procurement and preparation of food.

Fishing is another activity that is attributed to adult men. Net fishing is done by groups of men, but net fishing, as well as, line and pot fishing, are activities that all members of the household could have participated in. Gann (1918: Plate 2) observed Maya girls fishing, and today in Indian Church Village in northern Belize, line fishing is an activity that young boys and girls participate in together. Children and elders are particularly suited for participating in activities related to line and pot fishing and hunting of turtle. Both activities can occur together and do not

require specialized skill. Furthermore, the recovered net sinkers or line weights were fashioned quickly and easily from ceramic sherds.

Bow and arrow technology, probably introduced at Lamanai in the Late Postclassic period (Graham 1991) could have affected the frequency of birds and fish in the archaeological record (Emery 1999). We add that in turn it would have affected who participated in the production of projectile points and procurement of the animals. It is plausible that men, women, young people and elders made and used stone tools (Finlay 1997). The types of tools recovered indicate the presence of novice or inexperienced flint-knappers as seen in the evidence of hinge or step fractures on cores and flakes and the increase in the use expedient flake tools (Finlay 1997). Furthermore, the heterogeneity of the overall SSNP point assemblage suggests that a variety of individuals were manufacturing these tools. Many of the projectile points appear to have been made on recycled flake tools and debitage that could have been easily scavenged from earlier occupations. Even if children were not participating in the production of SSNP points, they surely would have known how to use bow and arrow technology and could easily have been hunting birds, fish, and turtles.

Discussion

As a household undergoes change, specific behaviors or activities may be abandoned or initiated, or the proportions of different activities may change relative to others. These changes may also alter the activities of members of the household and their gendered roles of production. Food preparation and procurement are two areas that are most sensitive to changes in the work schedules of household members (Brumfiel 1991), since all households must produce food in order to survive. It is clear

in our material assemblages that there is an overall decrease in labor expenditures related to food preparation and procurement reflecting a new level of efficiency in organization and production systems.

The vertebrates and invertebrates being consumed were located in close proximity to the household and could have been procured with minimal effort. The ceramic and lithic technologies related to procurement and processing of animal resources can be seen as "time-saving" labor expenditures. The tools used to procure the animals were quickly made with minimal effort or time invested in their production. The methods of food preparation are simple one-pot meals that also require minimal time investment. We suggest that the observed changes are indicative of changing work schedules and changes in gendered relations of production. During times of stress every able-bodied individual would need to contribute to provisioning the household. It appears that a greater number of individuals with fewer specialized skills were producing tools and participating in procurement and preparation of animals for consumption and tribute. We would propose that the evidence indicates that labor is being allocated to children and elders in these Late Postclassic-Colonial deposits. The increased demands by the Spanish state for women's products and the inclusion of teenagers and elders as tribute subjects must have affected what other household members did and it would have contributed to changes in gender relations of production expanding individual's roles and responsibilities. Most discussions of Maya gendered relations of production follow closely the binary division of labor between men and women to the exclusion of the productive labor of children and elders. But this may not have been the way the Maya viewed gender roles and responsibilities. There are several hints in documentary sources that children and

elders were considered a different gender, but this topic needs to be explored more fully. The data presented in this paper implies that there were more than two genders participating in household production at Lamanai. If we want to have a better understanding of ancient Maya household organization we need to include children and elders as active participants that contributed their productive labor to the household.

Conclusion

In our paper we have focused on the impact of Spanish colonial economic policies that would have impacted Maya households, suggesting that the changes in procurement and consumption of animal resources may reflect these impositions. We also attempted to provide a holistic view of Maya gender relations of production that included all potential actors who contributed labor to the household: men, women, children, and elders, instead of relying on the binary categories of man/woman. Current archaeological investigations at Lamanai are focused on evaluating, defining and differentiating the effect of Spanish political change on the daily life of Maya commoners. This is pertinent if we continue to make inferences from Spanish colonial documents to the pre-Columbian past without understanding the structure of the political-economic relationship between Maya households and the Spanish colonial regime during a critical, but rarely addressed transition in Maya history.

Acknowledgements. The authors would like to thank the Institute of Archaeology for granting the research permits to the Lamanai Archaeological Project. We would like to heartily thank Elizabeth Graham for all her continued support over the past years. Much heartfelt thanks to the community of Indian Church Village, in particular, *Los*

Sompopos, Jorge Vasquez, Geovanni Arevalo, Ventura Juarez, and Jose Vasquez, without their assistance none of this would have been possible. Many people are due our thanks for this research: Dr. John Morris, the staff at the Institute of Archaeology, and our American, Canadian, and Belizean project colleagues. Funding for the analysis was provided to Wiewall by a National Science Foundation Doctoral Dissertation Improvement Award and a Fellowship by the American Association of University Women.

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