CULTURAL CHANGE IN ECONOMY AND DIET IN THE LACANDON COMMUNITY OF MENSÄBÄK

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CULTURAL CHANGE IN ECONOMY AND DIET IN THE LACANDON COMMUNITY OF MENSÄBÄK

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To my mentor and friend Jon McGee.
Thank you for all those years of your continued support and belief in my abilities.

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CHAPTER 1: PLAYING ANTHROPOLOGIST IN A MEXICAN JUNGLE

1.1 Introduction

This thesis examines cultural change through examples of economics and diet among Lacandon Maya families in the small community of Mensäbäk as they become actors integrated into the larger, global economy. However, it has been a long and twisting path from my major in English to living among Lacandon Maya in their community in the jungle, documenting new cultural changes. During late middle school, I formed a concrete plan of becoming an English professor that I maintained until the fourth year of my Bachelor's degree. It took one week in an introductory anthropology course for me to drop my near-complete philosophy minor for a double major in anthropology and English. It only took one semester of coursework with my current mentor to make me serious about pursuing a graduate degree in cultural anthropology.

To me, studying cultural anthropology is necessary, for we live in a world of cultural ignorance, biases, prejudices, and ethnocentrism. As we live in an ever-increasingly globalized world, it becomes vital to understand other cultural groups and the effect of policies and economic restructuring on their ways of life. Throughout my childhood, I was given the opportunity to travel and live abroad, which provided many contrasts with my American perceptions. My family life also allowed me to observe firsthand the struggle between cultures, as I witnessed the tensions between the multi-

cultural backgrounds of my own parents. Believing that cultural awareness was highly important, I knew I wanted to be a cultural anthropologist, but I lacked a geographic area of interest.

In the course of my anthropology studies, I learned from my mentor Dr. R. Jon McGee of his lengthy ethnographic fieldwork in the Mexican state of Chiapas with a Maya group called the *Lacandon*. In his lectures and publications, he described these people as swidden (slash-and-burn) horticulturalists living in a tropical rainforest.

Interestingly, the men wore white tunics and had their hair naturally black and long with bangs similar to my own hairstyle. Although a patriarchal group, I learned that the Lacandon men and women worked together, both laboring separately but equally to benefit the family and community. I was captivated when Dr. McGee spoke of Mayas who enjoyed more leisure time than work. I was instantly attracted to a people devoid of the hectic schedules characteristic of my culture, and a people who value kinship, community, and most importantly, live in the present. I then wanted to study under Dr. McGee in his ethnographic area to experience a culture much different from my own, and notably, one that seemed more functional and utopian than my own.

And thus, I ventured into my thesis fieldwork in a Maya community surrounded by Mexico's remaining rainforest—little knowing that I would be slipping down leaf-littered hillsides, encountering five-inch scorpions and cockroaches, having a tick removed from my rear by a fellow researcher, wearing clothes that never seemed quite dry, being bit by a parasite-infested feral cat, or eating an inordinate amount of beans and tortillas. Despite these challenges, I would not trade any experience during my fieldwork. Mensäbäk provided me with beautiful and unique memories. Community members were

for the most part very kind, and I built wonderful relationships. I even brought home my very own Lacandon puppy. My time there was by far the highlight of my life to date and has deeply affected my worldview.

Having explored an array of perspectives and sub-disciplines in anthropology during my time in graduate school, I also became strongly attracted to the applied approach of the sub-discipline of medical anthropology. I have become deeply interested in the effects of violence on society, the human body, and health. More importantly, I enjoy blending political economy and health with my already-ardent, critical theoretical lens rooted in Marxist theory. Although I lacked training in methods for medical anthropology, I tailored my thesis research topic to fuse my interests in both medical and cultural anthropology.

1.2 The Lacandon Maya

The subjects of this research are the Lacandon Maya who live in the current-day Mexican state of Chiapas. This cultural group has been romanticized by various writers and scholars as a "simple" and "pristine people" living in the isolation of tropical rainforest (see McGee 2002:1). The early nineteenth century explorers believed there was a link between the Lacandon and ancient Maya civilization, and assumed that the Lacandon must be the descendents of the ancient Maya due to their close proximity to archaeological sites such as Palenque, Yaxchilan, and Bonampak. With opinions formed from such writing, the first ethnographers sought to discover traces of ancient Maya knowledge in studying the Lacandon.

Alfred M. Tozzer (1978 [1907]) is one of the first Lacandon ethnographers to live among the group and documented some aspects of their culture. He spent several weeks with the Lacandon starting in 1903 in search of "survivals" from their supposed ancient Maya past (McGee 2002:2). In hopes of building such a link, Tozzer's work focused primarily on religious rituals and left out the details of everyday Lacandon life. R. Jon McGee provides the most substantial ethnographic information thus far on the Lacandon in his intensive study of their culture that spanned nearly three decades starting in 1980 (1990; 2002). McGee's work functioned as a primary resource for my own thesis research.

The Lacandon Maya inhabit the *Selva Lacandona*, or Lacandon Rainforest, located in the southeast region of Chiapas that borders Guatemala. They differentiate themselves from other neighboring Maya groups as *Hach Winik*, or "real people." In the past, a "characteristic" Northern Lacandon man would have grown his hair long with bangs and wear a long white tunic, or *xikul*. Lacandon women would wear white smocks, long skirts, many seed necklaces, and have their hair in a long braid decorated with bird feathers. The Lacandon are a patriarchal group of Maya whose main subsistence has historically been swidden (or slash-and-burn) agriculture. In the past, Lacandon men conducted non-Christian rituals and ceremonies, hunted, constructed bows and arrows, and tended to their *milpas* (the large garden plot created by swidden). The women raised children, prepared and cooked meals, and wove clothing for family members. These are "traditional" gender roles that may be described for many cultural groups, but hold true for most of the Lacandon in the recorded past. However, as the Lacandon increasingly came into contact with the outside world from their seemingly isolated jungle residence,

their "traditional" roles and division of labor changed and continue to do so.

The Lacandon have been affected by different forces in the area where they live. Deforestation, notably of the Lacandon rainforest, has become a global issue of biodiversity loss. Some claim that nearly two-thirds of an original 1,500,000 hectares of forest has been cut or converted for other uses (O'Brien 1998:6). Much of the deforestation of the Lacandon rainforest is because of logging, the conversion of forest into livestock pasture for the international trade of beef, and the expansion of human settlements caused by rapid population growth in the area. (O'Brien 1998:7).

During the 1950s, Chol, Tzeltal, Tzotzil, and Tojolabal Maya migrated from the highlands and lowlands of Chiapas in search of land, followed by farmers from Tabasco, Puebla, and Guerrero (Boremanse 1998:9). In the early 1960s, as the rainforest received these land-hungry immigrants many of them were encouraged to plant grass for cattle grazing after the nutrients in the soil they farmed had been exhausted (Boremanse 1998:9). During the 1960s and 1970s, both the state of Mexico and the World Bank encouraged peasants to participate in the growing cattle industry (Howard 1998:365). Colonizers after 1970 received credit for cattle and a promise by the state government to purchase the wood they cut (Nash 1995:25). This accelerated deforestation at an alarming rate.

In 1971, the Mexican government granted the Lacandon 614,321 hectares of forest as a national park (Boremanse 1998:9). In 1978, the government expanded this land grant and created the Montes Azules Biosphere Reserve with support by the United Nations Educational, Scientific, and Cultural Organization (UNESCO; McGee 2002:78). Although the purpose of the biosphere reserve was to preserve the remaining Mexican

rainforest, the presence of the biosphere reserve has also created contention between the Lacandon Maya and other indigenous groups in the area who were forced to resettle in new planned communities. In all about 6,000 Tzeltal and Chol Maya living within the reserve's boundaries were forcibly relocated to communities such as Frontera Corazal and Jardin, while longer resident Chol and Tzeltal Maya were eventually granted property rights within the Lacandon communal land in the communities of Corozal and Palestina (McGee 2002:78), Boremanse 1998:9).

As greater Mexico experienced change adopting international policies with its integration into the global economy, so did small indigenous groups like the Lacandon. Globalization is a homogenizing force imposed around the world through nation states and global powers that control global markets (Shiva 1991:111). The incorporation of indigenous groups into the world economy has continued since the 1950's through the building of roads from communities off the Pan-American Highway (Whitmeyer and Hopcroft 1996:529). Although Mensäbäk is considered the most "isolated" of the three Lacandon communities, once roads connected to Mensäbäk in 1979, its community members became open to outside influence and change. Today, the Lacandon Maya are met with the forces of globalization as migrant populations increase in their area, the rainforest continues to be destroyed, and tourism continues to increase in Chiapas (Palka 2005:48). Influxes of outside influences continue and one begins to see Lacandon integration into the national and global economies, as tourism and the flow of international goods and services increase.

1.3 The Scope of This Thesis

This thesis examines cultural change in the Lacandon Maya community of Mensäbäk in the summer of 2011 and how it is shaped by current material conditions and international economic processes. My interest in the community of Mensäbäk was spurred by the fact that there has been little qualitative ethnographic research in this particular community.

In the summer of 2011, I spent the months of June and July conducting fieldwork in the Lacandon Maya community of Mensäbäk, which is situated in the Mexican state of Chiapas, a few hours away from the city and archaeological zone of Palenque. In the summer of 2010, I spent time in Mensäbäk doing directed studies under Dr. R. Jon McGee. At that time, I was granted permission by local families to return in 2011 to conduct my thesis research. I prepared to work in this area by taking Lacandon language courses from Dr. McGee; I already possessed basic Spanish-speaking abilities, which were useful as many of the Lacandon are bilingual. My research was possible in part because I had the support of Dr. Joel Palka and his graduate students who were present for the duration of my study in the community. My research was also funded by Dr. Palka as a contribution to his continuing archaeological research project in Mensäbäk.

Historically, the Lacandon are a patrilineal group whose main subsistence has depended on swidden agriculture. The economic structure practiced was reciprocity and labor was shaped by defined gender roles. However, today, the Lacandon communities are growing tourist destinations. In particular, tourism to Mensäbäk with its nearby lakes and archaeological sites has provided the community with new economic opportunities. In the past, the Lacandon relied primarily on subsistence agriculture to meet their food needs; today, because of a greater variety of economic opportunities, they have many

choices. Since they still use *milpas*, the Lacandon have the option to produce their own food. However, participation in the cash economy also enables Lacandon families to purchase processed and imported foods, as well as other material possessions.

When I first began my research, my aim was to show dietary changes from that described in past ethnographies. I had already observed such changes the previous summer during my initial time in Mensäbäk. The data I gathered concerned what foods were on Lacandon tables for various meals, what foods were in their pantries, what foods were growing in *milpas*, what foods they were purchasing, where they purchased these foods, and whether there was a difference in diet among men, women, and children. I hoped to discover why the Lacandon make the dietary choices they make as well as draw conclusions from these choices about their health. Researchers in the past have looked at *milpas* and swidden horticulture among the Lacandon Maya; however, no researcher had looked at *why* the Lacandon were eating what they were eating or had tried to understand their choices.

While gathering data trying to show that consumption patterns had changed among the Lacandon, I found that their choices were largely driven by economics. In the past, families grew their own food for their own consumption to survive, but now I observed that families were purchasing packaged foods. The new Lacandon diet was a product of their new economy. In researching how these families were able to acquire money for such purchases, I discovered a major economic shift from farming and reciprocity to wage-labor and access to government programs and assistance. Food choice is an arena in which many elements of economy and society meet. People's food choices involve their cultural background, the history of their community, the

fluctuations of both local and international markets, issues of status, the actions of multinational food corporations, as well as local, national, and international politics.

Examining such choices gives us insight into the ways in which communities are affected by the processes of globalization and the ways in which individual agency mediates between the global and the local.

Based on past ethnographic accounts, I realized I was witness to a great change in community relationships with the presence of new salaried positions and varied sources of cash among community members. Disparities in wealth have appeared in the community as people in Mensäbäk shift from a subsistence-based farming economy to one based on wage labor and government entitlement programs. During my research, I began to see that changing economics stood in the forefront of the cultural change in this community and that the changing diet was an excellent example of how these people are being affected. The focus of this thesis is to show cultural change among the Lacandon Maya in the community of Mensäbäk as they are becoming more integrated into the larger, global economy. With diet as my main example, I will show how changing Lacandon economics have resulted in differential access to resources, alienation of particular families from community resources, and the exploitation of some for the profit of others in the community. The new economic structure in Mensäbäk is affecting the lives of families in different ways and shaping the constraints and possibilities under which they operated.

1.4 Methods

I conducted this research using a variety of methods including direct observation, participant observation, focal follows, and unstructured and semi-structured interviews. I also did counts of the foods found in family *milpas*. I directly observed daily Lacandon life, took notes, and looked to verify cultural changes documented in existing Lacandon literature, such as change from swidden agriculture to wage-labor from government programs and the sale of crafts to tourists as main forms of subsistence. When I first arrived in the community, I spent time gathering some preliminary data in Mensäbäk by noting areas of residence and familial relationships. I established several focal follows in four particular households during different meals at different times of the week to compare the meals prepared by different families. I also looked to see whether there was a difference between the foods eaten by men, women, and children. To provide a good sample, two of these households were among the wealthiest in the community, and two were of the poorest households in the community, which I assessed by examining the accumulated material possessions of each family.

I observed what foods were in different families' pantries, which families had milpas, what foods they were growing, where the women were shopping for food, and what foods were available in different towns where the women shop (the privately owned *tiendas* or stores within Mensäbäk and the *tiendas* within the towns of El Tumbo and Palenque). I sought to discover whether there was a difference between the kinds of foods different members of the community bought, and I spent some time in the local tiendas observing where community members shopped and what they bought. I saw what foods were stocked and asked the owners what foods people typically bought.

Since the Lacandon lack public health records, I used interviews to gather information on peoples' diets in the past. Interviews provided me with information on whether certain families ate differently than others and whether it was socially prescribed to eat certain foods. These interviews took place with Lacandon women of various ages since they prepare the meals; this was beneficial to me and Lacandon research overall since I am a woman and this gave me unique access to female informants whose voices were largely unheard in previous research. I sought to discover the food choices of Lacandon women and the factors that play into their decisions. The questions I asked concerned food procurement and preparation (What foods were they eating? Where was the food coming from? How did they get the food? How much of the food did they get? What foods were valued? What were they feeding their children? Did adult and child diets differ? Did all families have the same diet? Did diet differ between the sexes?).

This research is important because there has been little qualitative cultural research in Mensäbäk or on Lacandon diet. My research also gives voice to female actors within the community of different economic standings, whose viewpoints have not been expressed in the largely male-dominated ethnographies on the Lacandon Maya. Most importantly, the data provided in this thesis is not particular to one small and isolated Maya community. Despite Mensäbäk's particularities, the process of a community's economic integration into the global economy and the resulting culture change can be found in other indigenous communities worldwide. The results of these global processes can have a positive or adverse effect on community organization and life as well.

1.5 A Caveat to My Research

During my research, I was a member of Dr. Palka's holistic research project, and lived with the archaeologists working on his project. An important issue I had not anticipated was the effect the archaeological project had on my research because it employed many members of the community. It is important to note that women, who functioned as my main informants and were acquaintances from my time in the community the previous year, were also employed by the project. This employment provided wages not customary to many of these community members, which influenced household incomes and undoubtedly affected several families' ability to purchase food.

1.6 Thesis Outline

Chapter 2 of this thesis will concern change in Lacandon economics. I will discuss historical Lacandon economics pre-1980 and how it entailed gendered labor divisions in religion, agriculture, hunting, cooking, and childcare. I then explain how the Lacandon entered a mixed economy including tourism in the 1990s. The second half of this chapter will discuss how the Lacandon in Mensäbäk now hold salaried positions or receive stipends from governmental aid programs. I will explain how my data derives from a close study from four households, two "poor" and two "wealthy." I will discuss who in each family works what position and what programs they receive money from. This will also include other forms of reported income.

Chapter 3 will detail Lacandon diet. I will first provide what is known of the Lacandon diet in the past, and discuss the change in diet that R. Jon McGee found as the

Lacandon entered a mixed economy in the 1990s. Then I will report the data I found during my research in Mensäbäk from observations and interviews, specifically focusing on the case study of four households. This chapter explains how Lacandon diet is conforming to their new capitalistic economy.

Chapter 4 will discuss how the change in Lacandon economics has brought about cultural change in the community of Mensäbäk. I will show current wealth disparities within the community and how the already well-to-do heads of the community hold the top-salaried positions and have more opportunity with employment through governmental programs. Differential wealth and access to resources has caused different power relations in the community that have led to the alienation and exploitation of some community members and affected relationships.

Chapter 5 concludes this thesis and comments on the process of indigenous communities entering the global economy worldwide. I include a cross-cultural example of a similar process happening to the Machiguenga Indians of Peru to demonstrate the similarities in this process worldwide. This chapter also offers my personal discussion of the data presented in this thesis. I will explore the Mexican government's heightened involvement with the particular community of Mensäbäk and its possible meaning. I will also discuss the Lacandon's ambivalence to the harmful effects of the foods they consume, which stems from unregulated marketing and misinformation. This chapter includes my opinion of the cultural changes shaped by shifting material conditions, as well as my prediction of how these forces will further affect the Lacandon in the future. I conclude by offering my further research plans in this area.

CHAPTER 2: CHANGE OF LACANDON ECONOMY

2.1 Introduction

This chapter will discuss a change in Lacandon economics with information from the early twentieth-century in other Lacandon communities to my research in the summer of 2011 in Mensäbäk. Although most early work on the Lacandon centered on religion in an attempt to draw links to the Ancient Maya, some evidence of gendered labor divisions and subsistence exist from Teobert Maler, Alfred M. Tozzer, Jacques Soustelle, Franz Blom and his wife Gertude Duby-Blom, and James D. Nations. Like others before him, R. Jon McGee initially focused on the Lacandon world of men and religion in the 1980s, but came to see changes in Lacandon economy in the community of Nahá in the 1990s and gained some insight into the lives of Lacandon women at the turn of the twenty-first century. This chapter will compare early Lacandon economics with the changes I saw in Mensäbäk in 2011 as the Lacandon there received government salaries and stipends. I also use a case study of four households from different wealth spectrums that I intensively worked with to exemplify the change in Lacandon economics and which demonstrate the effects of this shift.

2.2 Lacandon Economy Pre-1980

As I mentioned previously, the first ethnographers to study the Lacandon Maya did so in search of links to their supposed ancient Maya past. In particular, Lacandon religion and ritual was the focus of most of this work, but a few researchers did record some facets of Lacandon subsistence and their gender-based division of labor.

In 1898, German explorer Teobert Maler came across an abandoned *milpa* and Lacandon house compound. From his description of the items he found in the empty houses, one can start to piece together daily Lacandon life (Maler 1903). The *milpa* and crops Maler mentions show that the Lacandon practiced swidden agriculture as their form of subsistence. In the houses he searched, Maler found cooking implements such as clay pots, water jars, drinking gourds, *metates*, and spindles of cotton thread that illustrate some of the tasks of women at the time. Tobacco hung from the rafters of the houses, and he found sets of bows and arrows that men used for hunting. When Maler came across actual living Lacandon, he learned they built large thatch roofed houses in their *milpas* that were surrounded by smaller structures used for either rituals, cooking, or other activities.

Maler mostly described men's activities in his account. He noted that Lacandon men fished and hunted with bows and arrows and also described how the Lacandon made these weapons and fashioned projectile points. He noted the large *milpas* he saw in passing and some crops: corn, papaya, bananas, and sugar cane; however, although he knew these fields provided the bulk of the Lacandon's food, he did not notice whether men or women labored in these fields. From his mention of *manos* and metates, it can be assumed that the women spent a good amount of time grinding corn for tortillas. Maler also notes that he was frustrated that women would not sell him one of their back strap

looms with which they weaved their garments (Maler 1903:35).

Alfred Tozzer was able to study a Lacandon family a little more closely during several-week visits in 1903 and 1904 (1978). Tozzer also primarily focused on Lacandon religion, trying to find links with an ancient past, but he did note some aspects of the Lacandon division of labor between men and women. The primary responsibilities of men were making *milpa* and overseeing the spiritual well-being of their families in ritual activities. The men (husband and sons) cleared fields and planted *milpas* yielding various crops and conducted rituals in their ceremonial shelters. Tozzer also considered hunting to be an important activity in which the Lacandon men engaged. He gave a brief mention to women in that they ground corn for making tortillas, which took a large portion of each day. Tozzer also noted women spinning cotton thread for weaving on back strap looms.

In the 1930s, Jacques Soustelle visited three Lacandon communities, counting households and community members (1971). Although he focused on the aspects of anthropology that were popular in anthropology at the time, such as taking peoples' physical measurements and studying religion, he did reveal a variety of details concerning Lacandon labor and life (Soustelle 1971). For example, he reported that the Lacandon raised chickens and described some of the women's cooking techniques. He also described how women spun cotton thread and weaved on looms. Soustelle also described Lacandon *milpas* and how men hunted and fished with bows.

In the 1940s, Frans Blom and Gertrude Duby-Blom traveled and lived among the Lacandon. They saw that the Lacandon household was the unit of consumption and production. They noted the Lacandon as "excellent farmers" who had large cornfields that

also grew a variety of crops (Blom and Duby 1969:280). They recorded that the men were "good hunters and fishermen," and of course discussed their participation in religious ceremonies. Men also made bows and arrows, clay pots, built houses and made dugout canoes. They found that women ground corn and prepared tortillas, cooked, sewed clothing, wove hammocks, fetched water, skinned killed game, and beat bark cloth.

James D. Nations and Ronald B. Nigh conducted the most substantial research into Lacandon subsistence (1980). This labor is specific to men and the authors do not give any mention to women's roles. They described the Lacandon practice of swidden horticulture as a well-developed, sustained-yield food productive strategy for their rainforest ecological niche. Nations and Nigh believed the Lacandon used the same stable system that the ancient Maya used before them and were one of the few remaining Maya groups to do so. The Lacandon had a multipurpose land-use system in which they took advantage of a variety of food-producing areas. The Lacandon would utilize the primary forest, secondary growth, marshes, rivers, lakes, and streams for this task. This land-use system provided a diversity of plant species (Nations and Nigh documented over seventy species in a Lacandon *milpa*), as well as the animal species that found refuge in the *milpas* that became excellent game resources.

Swidden agriculture centers on felling primary or secondary forest, burning the cut areas, and planting selected species in the new *milpa* clearing (Nations and Nigh 1980:8). The Lacandon planted and harvested *milpas* for two to five consecutive years, after which they planted tree crops for natural forest regrowth. When the regrowth reached about four to seven meters in height (which is about a meter per year), the

Lacandon then either cleared and burned the area again for a second cultivation or allowed the area to regenerate into secondary forest, which required about twenty years of fallowing. Swidden farmers tended to prefer to make *milpa* from secondary growth; however, the benefits of clearing primary forest are high as one can grow up to six tons of shelled corn per hectare if the crop was planted in both the spring and fall (Nations and Nigh 1980:8).

The Lacandon would clear growth on their selected *milpa* site during January, February, or March, and allow the area to dry until mid-April before burning the field prior to planting in May and June. A farmer had to wait a month at least before planting corn in a burnt field, so in the meantime he prevented soil erosion by planting fast-growing root and tree crops, such as taro, chayote, papaya, bananas, and plantains (Nations and Nigh 1980:9). When the rains came in May or June, corn and squash were planted using a dibble stick. During the rainy season of May through October, a variety of other root, tree, grain, and vegetable crops were planted. Such plantings were signaled by the flowering of certain primary forest "indicator" species. All crops were dispersed across the *milpa* to prevent large growth clusters of a single species. In this sense, the Lacandon truly mirrored the rainforest's natural structure and growth by creating different crops simultaneously throughout the year at different ground levels.

The particular Lacandon swidden practice has been more productive and less destructive than some of their indigenous neighbors. According to Boremanse, slash and burn agriculture is a primary cause of tropical rainforest destruction through the loss of fertile soil (1998:8). The Lacandon practice of slash-and-burn agriculture, however, was not destructive when the Lacandon were the forest's only inhabitants. They used a three-

to-seven-years rotation cycle that allowed weeds to thrive in an exhausted plot, inhibiting secondary jungle growth (Boremanse 1998:9). They utilized abandoned corn fields for the cultivation of other crops, such as tobacco, agave, and sugar cane and fruit-producing trees (Boremanse 1998:9). The re-use of plots was more energy-efficient as well as less environmentally destructive. These slash-and-burn techniques somewhat halted with the forest's colonization by thousands of poor landless peasants. The other groups have adopted more destructive farming techniques, such as over-cultivation of plots, the use of pesticides, and the clearing of land for cattle grazing. Nations and Nigh (1980:26) saw the expansion of extensive cattle production as a threat to traditional swidden practice and rainforest biodiversity. To encourage beef production, the Mexican government encouraged land owners in Chiapas to clear and burn large areas of the tropical forest that were then planted with African pasture grasses. Although the blame for deforestation is constantly put on poor farming techniques, Nations and Nigh argue that indigenous people are simply supplying the labor in an emerging cattle export industry.

However, Nations and Nigh (1980) saw the Lacandon begin to abandon "traditional" *milpa* practices during their time as well. As Mahler noted, at the turn of the century the Lacandon lived in dispersed settlements of one or two families within the boundary of their *milpa*. This allowed for constant supervision of pests and the maintenance of fields. Since the 1970s, the Lacandon moved into larger communities of 100 individuals or more, planting their *milpas* a distance from the community, making visits and maintenance a little more time consuming and less frequent. The Lacandon are no longer weeding daily and may do so only once or twice during each growing season. The overgrowth of weeds hastened the usefulness of these sites. Nations and Nigh began

to see a decline in the Lacandon *milpa* practice as government agencies encouraged dependence on manufactured food items also (1980:3). This straying from traditional subsistence strategies for commercialized food products was also noted a decade later in R. Jon McGee's work in the Lacandon community of Nahá.

2.3 Lacandon Economy Post-1980

As it was mentioned previously, R. Jon McGee has done the most substantial work on the on the Lacandon Maya since the 1980s. His work has spanned nearly three decades. A large portion of his work was dedicated to Lacandon religion and ritual and centered around the lives of men. As a male researcher himself, McGee was fortunate enough to conduct the bulk of his research in the household of one of the last "traditional" elders in the community of Nahá. It should be noted though that his experience most likely provided a view of Lacandon life different from other households, as the head of this household was recognized as an important member of the community and the family was well-off in terms of basic necessities. After spending field season after field season and year after year in the same household, McGee was able to get the most comprehensive picture of daily Lacandon life and gendered labor divisions, although he notes that he did not pay particular attention to women until his ethnography Watching Lacandon Maya Lives (2002). One must remember that the Lacandon Maya are a patriarchal group, however, and that men, more particularly non-Lacandon men, are unable to converse with women or visit them in the absence of a husband or father because it is considered taboo. McGee became fairly close to the wives and daughters of his household over the years, but he was still not privy to all the information a female researcher may have had

access to as a woman.

In his first ethnography, *Life, Ritual, and Religion Among the Lacandon Maya* (1990), McGee detailed much of men's work in preparing and conducting religious ceremonies. His interest in the Lacandon Maya was spurred in part by their resistance to Christian conversion and the fact that they still performed rituals for their pantheon of gods. Although women did aid in some of these rituals by preparing food or tamales that would be "consumed" by their gods in the form of clay pots or "god pots," women are virtually absent from McGee's first work. In *Watching Lacandon Lives* (2002), however, McGee begins to distinguish between men and women's work.

During his research, McGee was able to witness a culture that was based on subsistence agriculture voluntarily transition to a mixed economy of both agriculture and commerce. As the community of Nahá was opened to outside influence from the building of roads and an airstrip, its members began to lapse in their reliance on *milpa* and started to participate in the growing tourism industry around the archaeological sites of Chiapas, notably Palenque. McGee witnessed the end of "traditional" Lacandon religion during his research as men became interested in commerce and the practice of ritual died off in younger generations. He claimed that the economic shift was profitable for several Lacandon families, but that surveys of *milpa* crops in 1995, 1997, and 1999, coupled with economic analyses of several Lacandon households, showed that the success of selling crafts to tourists led to a variety of changes in Lacandon material life and social relations (2002:72). This will be discussed more fully in Chapter 4.

During McGee's research, households were still polygynous and access to a man or woman's labor was still determined by marriage or kin. Men would make *milpa* with

the aid of their sons and carry out religious duties. Women would care for children, prepare and cook food, and make clothing. The abundance of offspring in a family functioned as available labor to help in household gardens and household tasks, especially in the case that their parents were in old age (2002:81). By the time they entered their teens, Lacandon men and women were fully capable of conducting the tasks prescribed by their gender, such as men making *milpa* and women preparing meals.

The process of making *milpa* during McGee's research was similar to that documented by Nations and Nigh (1980), although he did not witness yields of over seventy plant species. However, McGee did find the yields still more productive than those of neighboring Maya groups. Something that did change during McGee's research was that the Lacandon started to hire outside labor to work their *milpas* while they participated in the tourist economy. Instead of making *milpa* for consumption and survival, the Lacandon were now making money from the sale of tourist goods and would hire Tzeltal or Tzotzil laborers to maintain their *milpas*. This brought about some consequences for Lacandon *milpas*: the outside Maya laborers would use their erosive and degradating techniques on Lacandon *milpas*, such as the use of pesticides, and the variety and size of *milpa* yields declined since the Lacandon engagement in tourism meant they could replace some of what they had previously grown with purchased food. Again, the affects of the Lacandon's participation in the tourism economy in Nahá will be discussed further in Chapter 4.

The Lacandon were never fully isolated from the outside world, and they did conduct trade before the creation of roads by days of hard hiking into towns carrying all they could on their backs. However, the construction of a road from Palenque to Nahá in

1980 made trade much easier and Lacandon men could now move large quantities of crafts, such as bows and arrows, for sale to tourists in the city. Lacandon crafts were an enterprise in which both male and female household members participated. Women created jungle seed necklaces, but they also helped the men in creating clay figures and bows and arrows. However, the majority of income from craft sales in Nahá comes from bow and arrow sets. They ranged from a full-sized hunting set to a child's-sized toy. In the summer of 1997, McGee noted that the small sets went for 40 pesos (about \$5.15) US), the medium sets went for 50 pesos (about \$6.40 US), and the large sets went for 60 pesos (\$7.70 US; 2002:88). The bows and arrows were typically made with materials found in the surrounding forest, knapped points made from local chert, and feathers from exotic birds. These sets were sold to tourists directly at archaeological sites such as Palenque, or at a discounted price to shop owners in the city of San Cristobal (2002:89). The more bows and arrows a Lacandon family would produce, the more profit they could generate from sales. McGee witnessed the Lacandon selling their bows and arrows to tourists at Palenque for over twenty years, ranging sales anywhere from \$40 US dollars on a slow day and up to \$128 US dollars in ten minutes (2002:89).

McGee saw Lacandon families' ability to get money from the sale of crafts as a positive change to combat the uncertainties of an agricultural lifestyle. For example, if a family's *milpa* produced a poor yield due to pests or drought, they could supplement their stock by purchasing packaged food items with the income made from craft sales. Yet, McGee also saw many Lacandon families who hired Tzeltal laborers for their *milpas* and participated in the sale of crafts full-time run out of corn and be forced to purchase corn or instant corn tortilla mix with their earnings. There was a give and take in their

participation in this new mixed economy.

McGee also found that women were then able to play an active role in the tourist economy in addition to their gendered duties. He differentiated between "traditional" and "nontraditional" wives in his research. Nontraditional wives were the largest and youngest group he studied and they jointly participated in craft production with their husbands. The nontraditional women would wear Mexican clothes and makeup while their husbands kept their hair long and wore the traditional white tunics to be better able to sell to tourists who expected a "traditional" Lacandon look. Nontraditional women still washed clothes, prepared meals, and took care of their children just as traditional women did; however, there are some differences in the extent of these women's labors.

One place where traditional and nontraditional Lacandon women's duties varied was in food preparation. Since nontraditional Lacandon women were able to purchase food products, like canned food or instant tortilla mix known as *Maseca*, the labor and time required for food preparation was cut in half. Instead of grinding corn all day and hand patting tortillas, nontraditional women could now make tortilla dough from an instant mix in a matter of minutes and use a press to shape the tortillas. The thin consistency of *Maseca* also cooks faster than tortillas made of real corn. Globalization brought technological advances for Lacandon women, such as hand presses and instant tortilla mix, that eased the time and amount of energy expended in their labor. McGee concluded that *Maseca* was popular because it was easy to use and afforded women extra free time (2002:108).

A new role that McGee found among nontraditional women during his research was that they were allowed to take part in their family's finances (2002:109). He found

that the nontraditional women in Nahá were allowed to take control of their family's money, and that men supported this because they feared that if their wives did not control their finances they may waste their money on alcohol or other material items. This was an extreme change in the male/female Lacandon dynamics, which we will see is not shared by my informants from Mensäbäk in Chapter 4.

2.4 A Change in Lacandon Economy in Mensäbäk

In previous sections, I discussed the fact that the Lacandon Maya have been represented in ethnography as swidden horticulturalists whose economy has best been characterized as subsistence farming for consumption (McGee 2002; McGee 1990; Palka 2005; Boremanse 1998; Tozzer 1978). For the last several hundred years men have spent most of their time working in *milpas* or carrying out their religious obligations (McGee 2002:36). However, in the third section of this chapter, I pointed out that the Lacandon in the communities of Nahá and Lacanhá began entering the tourist economy around 1980 through community and ecological tours and the sale of indigenous crafts (McGee 2002:87), thereby entering a new mixed economy. Based on my research in the summer of 2011, I discovered that the Lacandon Maya in the community of Mensäbäk had entered the global economy through a different model than the other two Lacandon communities: tourism was never well developed in Mensäbäk. Instead, community members had supplemented agriculture with wage labor and monetary aid provided by the Mexican Federal Government.

There are numerous governmental aid programs in which the ladino and indigenous populations of Mexico participate, with foci ranging from conservation,

development, employment, education, and health to welfare. However, the Lacandon of Mensäbäk receive wages or monthly stipends from programs or employment that were created by the Mexican Federal government in conjunction with overseas structural adjustment programs (SAPs). SAPs were imposed on non-industrialized nations who had defaulted on loans or wanted loans rescheduled and that wished to receive new loans. These programs often required the nation in question to drastically change their "economic and social policies in accordance with global free market priorities" in an attempt to facilitate economic growth (Barlow and Clarke 2002:84). The Mexican programs from which the Lacandon are compensated fall under three branches of the Mexican Federal Government: Secretaría de Desarrollo Social (SEDESOL), the Secretariat of Social Development; Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), the Secretariat of Environment and Natural Resources; and Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA), or the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food. The Lacandon in Mensäbäk receive resources from eight of these programs. These eight programs are:

- 1. *Empleo Temporal* (PET), or Temporary Employment, serves people affected by low labor demand with temporary financial support for their participation in projects (http://www.sedesol.gob.mx/es/SEDESOL/Empleo_Temporal_PET).
- 2. Comisión Nacional Forestal (CONAFOR), or National Forestry Commission, is employment that promotes conservation and restoration in Mexico's forests (http://www.conafor.gob.mx/portal).
 - 3. Oportunidades, or Opportunities, is monetary support for families living in

extreme poverty to help them attain better nutrition and education for children (http://www.oportunidades.gob.mx/portal/).

- 4. *Programa de Apoyos Directos al Campo* (PROCAMPO), or Program of Direct Support to the Countryside is monetary support per hectare of harvested eligible crop (http://www.aserca.gob.mx/artman/publish/article_183.asp).
- 5. 70 y Más (70+), or 70 and More is monetary support for seniors (http://www.sedesol.gob.mx/en/SEDESOL/Programa_de_70_y_mas).
- 6. Comisión Nacional de Áreas Naturales Protegidas (CONANP), or National Commission of Protected Natural Areas, is employment for enacting environmental policies (http://www.conanp.gob.mx/).
- 7. Reducing Emissions from Deforestation and Forest Degradation (REDD+) is monetary support from the United Nations collaborative initiative on reducing emissions from deforestation and forest degradation in developing countries (http://www.unredd.org/AboutREDD/tabid/582/Default.aspx).
- 8. *Procuraduría Federal de Protección al Ambiente* (PROFEPA), or Federal Environmental Protection, is employment that safeguards environmental compliance with environmental legislation (http://www.profepa.gob.mx/).

During my research, I noted that many members of the community were receiving wages or stipends from one or more of these eight governmental programs. PROCAMPO or *Oportunidades* were among the most frequent programs in which they reported participating. One woman told me that although community members received wages from PROFEPA prior to my arrival in the community, no PROFEPA funds were being distributed during the time I was there. REDD+ disbursements started at the beginning of

2011, but people were reluctant to discuss who received these stipends and under what circumstances. Community members also agreed that jobs with CONAFOR and CONANP were the top-salaried positions.

In addition, in 2011 the Lacandon in all three communities were granted funding from the government to create a Lacandon-hired police force, yet another form of government employment. With the new police force as an exception, to qualify for any of these positions or stipends, the Lacandon heads of households must be landowners or *communeros*.

Oportunidades started as an anti-poverty program during the Vicente Fox administration in 2001, offering direct cash transfers to poor rural households on the condition that their members make human capital investments, such as attending basic education and health services

(http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&the SitePK=338397&menuPK=338432&Projectid=P115067). Children are no longer eligible for aid by fifteen years of age under this program. The community director of *Oportunidades* told me that *Communeros*, or landowners make 2,000 pesos (roughly US \$167.00) per month through the program. A Lacandon must possess birth records to apply for this aid. The community program director also mentioned that *Oportunidades* gives 200 pesos (roughly US \$17.00) per two months for small children. Twelve families in Mensäbäk receive *Oportunidades*; two families do not receive this aid.

The World Bank claimed that the purpose of its PROCAMPO program was to provide compensation to Mexican farmers in the wake of growing external competition for the sale of crops (primarily from the United States), but it also provided monetary

support for farmers to modernize production and switch to higher-value crops in the new markets opened by NAFTA. McGee notes that in 1997, PROCAMPO paid Lacandon farmers 2,000 pesos (about US \$256.00) per hectare of corn (2002:96). For the Lacandon to profit from PROCAMPO, they need to expand their corn production beyond what is needed for household consumption to get larger payments from the program, and in Nahá they did so by hiring more day labor to cultivate larger areas.

There are some other ways the Lacandon in Mensäbäk receive money outside of governmental wages and aid. Many teens and a few wives were employed by an archaeological project in Mensäbäk the summer of 2011, which provided a wage of 150 pesos per day (around US \$13.00). Most families participate in making tourist crafts (forest seed necklaces, bows and arrows made with exotic feathers, or cigars made with local tobacco), but this income is minute and only supplemental because although tourist traffic is increasing in Mensäbäk, it is less-visited by tourists than the other Lacandon communities. Three of the wealthy families in the community have built and operate stores or *tiendas* where the community's residents can purchase packaged foods. I also found that the richer families with cars also offered rides for a 100 pesos (about \$8.00 US dollars) per route to the nearest intersection (*cruzero*) where one can catch public transportation to Palenque.

2.5 Four Household Case Studies in Mensäbäk

To demonstrate this change in Lacandon economics, I chose four households to study intensively. I picked two families that represented poor members of the community, and two families that represented wealthy members. I determined such distinctions by

observing the material conditions of the households in Mensäbäk, as well as general opinion from community members and researchers' previous experiences. To be wealthy in Mensäbäk is to have Western goods and technology, such as television, radios, and vehicles. With the local economy changing from agricultural production to one based on governmental aid and salaried programs, a stark contrast in wealth and inequality has developed between families in the last decade. This will be discussed some here and more extensively in Chapter 4. At this time, there is no middle class in Mensäbäk and thus I chose two of the poorer households and two of the wealthier households as samples that represented the sides of Lacandon income and diet in Mensäbäk. To maintain the family members' anonymity, the four households will simply be referred to as "Family One," "Family Two," "Family Three," and "Family Four."

Household and Family #1

In the summer of 2011, Family One's household consists of the husband (age 67), his wife (age 35), and seven children, two of whom were boys (ages 3 and 8) and five girls (ages 1, 2, 4, 13 and 18). Family One is a part of the poor sample of my study. The husband was what we would consider "retired" in the United States, and receiving monetary aid from two governmental programs (70 *y mas* and PROCAMPO). He received 1,500 pesos (roughly US\$125.00) per two months through these two programs. The wife was a recipient of another governmental aid program (*Opportunidades*), but reported during my visits that she had not received her money when she was supposed to. Two of the daughters from this family were employed by the ongoing archaeology project during the period I was conducting my research.

Household and Family # 2

The second example of a poor household, Family Two's household consists of the husband (age 37), two wives (ages 19 and 32), and four children, three of which were boys (ages 14 and 6) and one girl (age 2). The sons from the elder wife and previous wives live directly near this household with their children as well. Neither the husband nor his wives receive aid from any governmental programs or a salaried position. No one in Family Two's compound receives *Oportunidades*. One of the husband's son's wives did not want it and did not offer an explanation for this choice, but the others could not get it because they lacked the proper birth records. The wives received a little income from the sale of goods to tourists and through the work they performed for the archaeology project near the end of my research.

Household and Family # 3

Family Three's household consists of the husband (age 41), the wife (age 39), and seven children, five of whom are girls (ages 6, 10, 17, 21, and 22) and two boys (ages 2 and 4). Family Three are members of the wealthy sample of my study. I was surprised when the wife of Family Three discussed the sources of some of her family's income, which understandably is a subject not many Lacandon were willing to divulge to a researcher and practical stranger. She received 800 pesos (about \$66.00 US dollars) every two months from *Oportunidades*. Two of her children got 200 pesos (about \$16.00 US dollars) in *Oportunidades* payments every two months. Her husband received 4,000 pesos (about \$333.00 US dollars) every two months for his position at CONAFOR. The husband sold

his corn locally, but I did not learn whether or not he received money from PROCAMPO for this. He also owned a *tienda* and gave community members rides to the *cruzero* for 100 pesos (about \$8.00 US dollars) per person one way (this is quite costly as this drive can take up to ten minutes on a dirt road, but the *combi* ride to Palenque costs no more than 40 pesos one way). Two of the daughters in this household were employed by the archaeology project as well. Thus, the husband of this family was employed by CONAFOR, received governmental aid, owned and partly operated a *tienda*, and sold surplus crop from his *milpa*. The wife received governmental aid from *Opportunidades* and the small sales of some seed jewelry.

Household and Family # 4

Family Four's household consisted of the husband (age 42), wife (age 29), and three children, all of whom were girls (ages 1, 3 and 8). The husband's sons from a previous marriage lived in a separate compound near their mother. Family Four is also part of the wealthy sample of my study. The husband was employed by CONANP, which was said to pay the highest salary out of the governmental programs, received governmental aid, and sold surplus crops from his *milpa*. The wife received government aid from *Opportunidades* as well as money from some sales of jewelry.

2.6 Conclusion

This chapter provided an overview of the changes in Lacandon household economy from the early twentieth century to present. The Lacandon were reported to labor first on a household level, and then on a communal one. As the Lacandon became more open to outside influences, their community and family relationships changed. R. Jon McGee began to document a new shift in Lacandon economy in the community of Nahá as they entered the tourist trade in the 1990s. My findings in Mensäbäk in 2011 show that the Lacandon have even further strayed from growing food for consumption and household and communal labor to individualized monetary income from government-salaried positions and stipends. Economic shifts from subsistence agriculture to a more capitalistic model are not unique in our increasingly globalized world, particularly with the restructuring of developing nations' economies. Members of indigenous communities have come to learn to operate simultaneously in several productive systems, such as subsistence farming, petty commodity production, and commercial sales (Nash 1994:7). We will discuss how this change of economy in Mensäbäk has affected community members on a more individualized level in following chapters.

CHAPTER 3: LACANDON PAST AND PRESENT DIET

3.1 Introduction

This chapter will provide the information available on Lacandon diet pre-1980, post-1980, and during my research in the community of Mensäbäk in 2011. Diet is a domain of Lacandon life that has been little researched and was the focus of my intended thesis prior to my entering the field. I discuss the types of foods eaten from *milpas* in the past and present. I will also provide information on the Lacandon's adoption of commercialized foods into their diets that started in the 1990s and had increased by the year of my research. The new Lacandon diet is a result of their new economy. I provide dietary data on the four-household case study that was used in the previous chapter to illustrate the changing Lacandon economy.

3.2 Available Documentation of Lacandon Diet Pre-1980

In Chapter 2, I discussed the traditional Lacandon practice of swidden horticulture subsistence. For several decades, Lacandon *milpa* reliance has decreased as they become increasingly involved in wage labor and the tourist trade. Now, the Lacandon consume *milpa* produce in conjunction with packaged, commercialized food products.

At the beginning of the twentieth-century, Alfred Tozzer (1978 [1907]) briefly

described the division of labor between men and women in terms of diet. The men, as described previously, cleared fields and planted *milpas* yielding various crops. The following table lists the crops that Tozzer noted in his ethnography:

TABLE 3.1 Crops in a Lacandon Milpa in 1903

Achiote	Cotton	Manioc
Avocados	Gourds	Oranges
Anona	Grapefruit	Papaya
	Guanabana	
Bananas	(Soursop)	Pineapple
Black Beans	Guayaba (Guava)	Sugarcane
Cacao	Lima Beans	Sweet Potatoes
Chayote	Limes	Tamarind
Cherry Tomatoes	Maize	Tobacco
Chicosapote	Mamey	
Chilies	Mango	

Source: Adapted from *Watching Lacandon Lives* by R. Jon McGee, (2004), Boston: Allyn & Bacon, p. 35

However, Tozzer's primary interest was Lacandon religion and agriculture was not specifically studied until the work of James D. Nations and Ronald B. Nigh in the 1970s. The following table lists the foods consumed from Lacandon *milpas* that Nations and Nigh documented:

TABLE 3.2 Crops Consumed from Lacandon Milpas in the 1970s

Onion	Squash	Beans
Scallion	Garlic Vine	Plum
Garlic	Lemon Grass	Chokecherry
Pineapple	Yam	Guava
Custard Apple	Fennel	Sugar Cane
Spiny Custard Apple	Sweet Potato	Chayote
Annato	Physic Nut	Cacao
Chile	Cherry Tomato	Malangra
Papaya	Manioc	Corn
Epasote	Mint	Ginger
Watermelon	Banana	Wild Pineapple
Lime	Plantain	Wild Dogbane
Lemon	Tobacco	Cuapinole
Grapefruit	Rice	Sapodillo
Orange	Jimaca	Epiphyte
Stingless Malmujer	Avocado	Wild Sugar Vine
Coriander	Parsley	

Source: Adapted from "The Evolutionary Potential of Lacandon Maya Sustained-Yield Tropical Forest Agriculture" by James D. Nations and Ronald B. Nigh, (1980), Journal of Anthropologic Research, Vol. 36, No. 1, (pp. 10-11).

There is a substantial increase in documented crops from Tozzer's ethnography (1978 [1907]) compared to Nations and Nigh's article (they claim that Lacandon *milpas* can produce over 70 plant species;1980); however, Tozzer only spent a few weeks in the field and did not emphasize Lacandon agriculture, while Nations and Nigh's research focused on Lacandon milpa practices and was of much longer duration.

R. Jon McGee notes that although Tozzer's information on the Lacandon agriculture system went little beyond the cultivation of corn and a few of the crops listed in Table 4.1, Tozzer considered forest and *milpa* hunting to be an important activity in which the Lacandon men engaged (2002:35-36). Tozzer noted "deer, turkeys, wild boar, partridge, armadillo, quail, howler monkeys, spider monkeys, and agouti as the most common forms of game" alongside men's fishing for turtles, turtle eggs, freshwater crabs, and snails (2004:36). McGee doubts that game consisted of a large portion of Lacandon

diet despite Tozzer's emphasis on hunting and notes that many of these sources of protein, such as monkey meat, were used as filling in ceremonial tamales called *nahwah* for religious purposes during the time of his research that commenced in 1980 (2004:36).

Gertrude Duby and Franz Blom (1969) reported some information on Lacandon diet. They saw the Lacandon as excellent *milpa* farmers that could produce crops such as sweet potatoes, macal, chilies, chayote, onions, garlic, sugarcane, pineapples, watermelons, and a variety of fruit trees (Duby and Blom 1969:281). Corn was integral to daily life as it was either eaten whole on the cob, dried and ground into tortillas, cooked into tamales (filled with meat or beans), or made into *posole* (a corn gruel drink). They noted that *posole* may be consumed with salt, chile, cacao, sugar, or honey. Duby and Blom also acknowledged Lacandon practices of fishing and hunting at this time. Game may consist of currasow, wild turkey, partridge, monkeys, wild pigs, armadillos, and other animals.

Nations and Nigh (1980) also documented the forms of game consumed by the Lacandon that were hunted in Lacandon *milpas* and the surrounding tropical rainforest. The following table lists potential game through the animals that could be found in *milpas*:

TABLE 3.3 Animals Found Feeding on Milpa Crops

Grackle	Brocket Deer	Forest Squirrel
Paca	Coatimondi	Weevil
Agouti	Parrot	Rabbit
Armadillo	Raccoon	White-Tailed
		Deer
Oppossum	Rat	Collared Peccary
Pileated Woodpecker	Red Squirrel	Earwig

Source: Adapted from "The Evolutionary Potential of Lacandon Maya Sustained-Yield Tropical Forest Agriculture" by James D. Nations and Ronald B. Nigh, (1980), Journal of Anthropologic Research, Vol. 36, No. 1, (pp. 10-11).

In addition to mammals, Nations and Nigh provided information on aquatic food:

TABLE 3.4 Aquatic Food Animals

River Snail	Sabalo	"Green Frog"
Apple Snail	Tenguayaca	"Yellow Turtle"
Sardine	Coruco	Soft-shelled Turtle
Macbil	Catfish	River Turtle
Boca de Fuego	Salmon	Guao
Castarrica, Jojarra	River Eel	Mud Turtle
Catfish	Crayfish	Yellow River Crocodile
Pig Fish	Fresh-water Crab	Swamp Crocodile
Sabalo	Tree Frog	
Tenguayaca	Marsh Frog	

Source: Adapted from "The Evolutionary Potential of Lacandon Maya Sustained-Yield Tropical Forest Agriculture" by James D. Nations and Ronald B. Nigh, (1980), Journal of Anthropologic Research, Vol. 36, No. 1, (p. 25).

Historically then it can be demonstrated that the Lacandon consumed a wide variety of food sources other than plant foods.

Tozzer gave a brief mention to women's roles in relation to diet. He described their sole contribution to food preparation as grinding corn for making tortillas, which took a large portion of each day (McGee 2002:34). Utilizing stone metates, the women made tortillas as well as tamales and *posole* or *ma'ats*, a corn gruel beverage typically consumed by men while working in their *milpas* (McGee 2002:34).

In sum, a partial record of Lacandon diets in the last century can be reconstructed from the fragmentary accounts of people who visited Lacandon communities, but systematic data is largely missing, until the research of Nations and Nigh in the nineteen seventies. We also know little about Lacandon diet in relation to their health as the Lacandon lack health records.

3.3 Available Documentation of Lacandon Diet Post-1980

R. Jon McGee's work (2002) is the most current ethnographic resource that has documented dietary changes in the last three decades in response to increased contact with the outside world and changes in Lacandon economy. In the case of communities Lacanhá and Nahá, the part-time or full-time investment in the production and sale of Lacandon crafts impacted *milpa* cultivation (McGee 2002:112). With a decline of available *milpa* crops, McGee noticed an increase in Lacandon purchase of prepackaged foods (McGee 2002:112). His documentation in Nahá is a glimpse of the higher level of consumption of commercialized food products than was present in Mensäbäk *tiendas* or local stores during my research in 2011.

During the first few years of McGee's ethnographic research, he recalls a staple diet of tortillas and beans (2002:112). Such meals were supplemented by fruit, other vegetables such as tomatoes and chayote, and pasta shells, eggs, and herbs (2002:113). Meat was consumed once or twice per week, consisting of chicken, spider monkey, venison, fish, or *tepesquintli* (a rodent; 2002:113). However, it is important to note that McGee stayed in the family compound of Chan K'in Viejo for the duration of his research. As noted earlier, this was one of the wealthiest families in Nahá. The luxury of weekly meat may not have been present in all Lacandon households.

McGee recalls breakfasts during his ethnographic research that consisted of beans and tortillas (2002:58) that is still the staple in Lacandon society today. Lunch also typically consisted of beans and tortillas and McGee particularly notes a lunch with macaroni pasta cooked with tuna and tomatoes or the occasional homemade corn chips referred to as *päkbil wah* (2002:60). He also documents that husbands and their sons

drank *ma'ats*, and commented on the convenience of the beverage while working in *milpas* (2002:59), which will still holds true for the Lacandon in my data.

McGee claims the family diet changed by 1995 from his initial recordings (2002:113). Although the staple of beans and tortillas remained, game became rare due to deforestation and indigenous migration (2002:113). In his fieldnotes on meal lists from the months of January, February, and April in 1995, his breakfasts were typically oatmeal with fruit, tortillas with beans, eggs, or chayote and usually served with coffee. He wrote that his lunches typically consisted of tortillas with beans or eggs, rice, baked squash, or chicken. For dinners, McGee reported tomato and chicken soups, tortillas with beans, beef, chicken, and on two occasions howler monkey and on one occasion toucan (before hunting them became illegal).

The Lacandon in Nahá sometimes purchased foods from traveling vendors and there was an increase in the consumption of packaged foods (2002:113). McGee documented the following packaged foods:

TABLE 3.5 Sample Packaged Foods Consumed in Nahá, 1995

Cheese	Canned tuna	Canned
		Peppers
Pasta	Canned ham	Herbal tea
Rice	Dried fish	Nestlé's Quik
Instant coffee	Beef	Soft drinks
Popcorn	Canned sardines	Sugar
Bouillon cubes	Powdered milk	Oatmeal

Source: Adapted from Watching Lacandon Lives by R. Jon McGee, (2004), Boston: Allyn & Bacon, p. 113

Thus, he observed that the Lacandon diet went from a largely vegetarian diet to one higher in fat and sugar and implied that the traditional diet was replaced with one higher in sugar and fats (2002:113). Yet, no anthropologist had conducted health measurements to gauge the impact of such dietary changes, and this remains the case today. McGee observed many cases of poor dental health that he attributed to their changing diet, heavy consumption of soft drinks (2002:113). This was also observed specifically among children during my own research in Mensäbäk. McGee saw the initial effects of a globalized Lacandon diet in the 1990s that had increased by the time of my own research in 2011.

3.4 Results from Four Household Case Studies in Mensäbäk

To examine Lacandon Maya diet in the community of Mensäbäk, I chose the same four households discussed in the previous chapter concerning the changing Lacandon economy. With the economy in the community changing from agricultural production to one based on governmental aid and salaried programs, a stark contrast in wealth and inequality has developed between families in the last decade, and these four households represent the opposite extremes of Lacandon income and diet in Mensäbäk.

To obtain the results for each of the four households, I used direct observation, focal follows, participant observation, unstructured, and semi-structured interviews. I recruited the assistance of the male heads of each household to show me their *milpa* plots and point to and describe the crops presently grown in them. The purpose of the *milpa* counts was to compare the actual material evidence with claims from each household. The results from the interviews are combined responses from the females, wives, and daughters who prepare the meals within each household.

It is important to note that I provided food items, such as cooking oil, packaged beans, rice, and instant tortilla mix as compensation for the time Lacandon women spent talking with me. I had heard rumors of men taking money from women and feared that it would create conflicts between family members if I paid women in my sample. The men of the four households were paid 50 pesos each (approximately \$4.17 US dollars at the time) for guiding me through their milpas, as food items were not a desirable or useful payment (food is the responsibility of women in most cases). Food was initially given as payment to reluctant and shy women who felt uncomfortable being subjects of my research. These same women happened to be residents of the poorer households of my study, often claiming that they did not have food to prepare during my observations in their homes. On a number of occasions, the women used the food I brought for their meals, which likely altered my results on those days. However, I am confident that the foods I gave, such as beans, rice, and tortilla mix, did not alter the reality of many Lacandon meals, as they have been an observable staple in all the households in Mensäbäk I visited during the previous year and follow trends that McGee observed during his time in Nahá.

Many of the young women from these four households, were also employed by the archeological project that was taking place at the same time. This required the bulk of my informants to be absent from home most days, which meant that older married women were my main subjects of observation during these times. Also, besides direct employment for which they were compensated, the Lacandon Maya have a different mentality concerning scheduling arrangements, time, and prior obligations than we Westerners hold in the United States. On many occasions, an informant would cancel our

time together to tend to other personal or community work, and sometimes the appointments were outright forgotten. This took pursuit on my part to reschedule time in the future or make impromptu visits to the households. The following are results from my research during the months of June and July of 2011.

Household and Family #1

As reported in the previous chapter, Family One's household consists of the husband, his wife, and seven children, two of whom were boys and five girls. Family One is a part of the poor sample of my study. The husband was what we would consider "retired" in the United States and received monetary aid from two governmental programs (70 *y mas* and PROCAMPO). The wife was a recipient from another governmental aid program (*Opportunidades*), but reported during my visits that she had not received her money when she was supposed to. Two of the daughters were employed by the ongoing archaeological project during the period I was conducting my research.

From the compiled responses from my main interview guide, I recorded that the family typically ate breakfast at 8am, lunch was typically served at 12pm, and dinner was eaten later at 6pm. The family also snacked throughout the day, usually on cookies, potato chips, sweet bread, fruits, apples, oranges, mangoes, and bananas.

Children ate the same foods as adults with the exception of spicy foods. Those under the age of two are breast-fed. This family would only eat meat, chicken specifically, once every one to two months but consumed eggs regularly. The family fished in the local lake and estimated that they ate fish once every two weeks. This family did not eat beef, but they did not say whether this was due to financial constraints.

Family One's typical breakfast consisted of beans and eggs. *Posole* or *ma'ats* was usually consumed for lunch. Dinners consisted of rice, beans, and tortillas. Often times, members of this particular family did not eat dinner unless they were hungry; as a substitute, they reported just drinking coffee or pre-mixed *horchata* (a rice drink). Family members drank water with orange juice, *horchata*, *atole* (corn gruel in hot water), *posole* or *ma'ats*, water, artificially flavored juices, sodas, chocolate milk, and coffee.

This family purchased local foods from the three community *tiendas*, primarily one the closest to their household. From these stores, the women bought canned salsa, beans, cooking oil, tuna, soda, chips, crackers, candy, and instant tortilla mix.

The eldest daughter, who was seventeen, knew how to cook all meals like her mother. The second eldest daughter, who was thirteen, only cooked eggs and prepared basic foods. It is common that only one individual cooks at a time and such duties are alternated between capable females. Men and women eat the same foods. The crops that the family reported to have in their father's *milpa* during the summer were squash, achiote, corn, beans, sweet potatoes, yucca, tomatoes, and onions. Foods were purchased in Mensäbäk, El Tumbo, and (rarely) Palenque. They reported their favorite meal to be eggs and tortillas, which again is a part of daily Lacandon life.

The women in this family constantly used instant tortilla mix claiming that they had run out of corn in their *milpa*. The instant tortilla mix, *Maseca*, which cost 10 pesos a pack (roughly \$0.80 US dollars) in the local *tiendas*, provided enough tortillas for several meals. The claim that they had no corn proved true as I observed that the corn was not ready for harvesting when I visited the family *milpa*. In this part of Chiapas, corn is not ready for harvest until August or September. Family One's *milpa* displayed un-ripe crops

of squash, corn, yucca, peanuts, plantains, and black beans. The husband hired workers to tend to his *milpa*, who he paid with his two governmental stipends, one of which I discovered was 500 pesos per month (roughly \$41.00 US dollars). The husband claimed that he did not sell his *milpa* yields, which ended up proving false as his wife and other families reported that he received money from PROCAMPO in the sale of his corn. It would seem that rather than always eating their own corn, this family might sell it and buy instant tortilla mix instead.

The interview information provided by the women of Family One held consistent with my observations. However, the family underestimated the significant role that prepackaged foods played in their everyday diets. The children were constant consumers of junk food snacks, such as chips, candies, cookies, sweet cakes, and bottled sodas. I saw them almost daily walking to the *tiendas* and returning with these products. Despite the family's constant complaint of poverty, a 3L bottle of soda was on the table at all the dinners I observed.

The wife and children claimed that the husband of Family One sometimes contributed money towards the purchase of food. I discovered during my research that the two daughters that had been working for the archaeological project were helping their family in supplying some of their wages for food. It was primarily the wife's responsibility to provide the family with food with her *Opportunidades* stipend; the husband paid for *milpa* labor with his stipends.

Household and Family # 2

Family Two's household consisted of the husband, two wives, and four children

(three which boys and one girl). Family Two was also a member of the poor sample of my study. The sons from the elder wife and previous wives lived directly near this household with their children as well. The husband did not receive aid from any governmental programs or a salaried position. The wives did not receive governmental aid either. The two wives in Family Two were employed by the archaeological project near the end of my research.

From the two wives' responses from interviews, I recorded that the family typically ate breakfast between 6 and 8am; lunch was typically served at 12pm, and dinner was eaten around 6 or 7pm. The family did snack throughout the day, usually on fruits, chips, sugar cane, and tortillas. Children ate the same foods as adults and typically got to eat when they wanted. This family only ate chicken once every one to two months. Fish was eaten once every two weeks as it was fished from the lake.

Their typical breakfast consisted of beans and tortillas or eggs if they had them. The same foods may be re-used for lunch. Dinners consisted of soups, rice, beans, and tortillas. Family members drank water with fruit juices, *posole* or *ma'ats*, water, artificially flavored juices, and sodas.

The wives, husband, and sons all ate the same meals and at the same times. The two wives shared the duties of preparing and cooking meals. The wives in this family described a "traditional" Lacandon meal as chicken tamales. This family purchased local foods from the three community *tiendas*, usually the one closest to their home. From these stores, the women bought beans, cooking oil, tuna, soda, instant tortilla mix, and chips. The crops that the family claimed to have in their husband's *milpa* were squash, achiote, and sugar cane. Foods were purchased in Mensäbäk, El Tumbo, and Palenque

when they were able to get there. The youngest wife reported chicken tamales as her favorite food, while the older wife preferred cooked snails and turtle.

The wives of this family and the husband claimed that the corn in their *milpa* was out; they used instant tortilla mix as a substitute in preparing tortillas. This proved true, as the husband had just planted a new *milpa* of corn since the older one was out of corn. The head of household had two milpas: one filled with corn that was not ready and one with more crop variety. The older *milpa* plot had ripe tobacco, cane sugar, sweet potatoes pineapple, yucca, achiote, onion, and cilantro. The husband did not hire laborers; he worked the milpa himself every two to three days, which was unique among the four families.

The interview information provided by the women of Family Two held consistent with observations of meals and fruit snacking, but not in relation to the rest of their children's daily diets. The children were constant consumers of junk food snacks, such as chips, candies, cookies, sweet cakes, and bottled sodas. I recorded one son from Family Two consuming or purchasing what may be considered "junk food" 21 times out of the near two months of observations in my fieldnotes. The children of this household were seen quite often purchasing 3L sodas, chips, cookies, and candies. Family Two is arguably the most impoverished family in the community, yet the children were always somehow given the opportunity and monetary support from their parents in purchasing junk foods from the *tiendas*. Children may have had independent incomes or their parents had other sources of income that I was not aware of.

The wives claimed that the husband of Family Two paid for the purchases of food. He must have done this with either saved wages from a previous job or from the

sale of Lacandon crafts to tourists, as he was not receiving stipends or wages from any of the governmental aid programs at the time. This man was the only cultivator of tobacco or *hach kutz* ("real tobacco") with which he made cigars for tourists. The two wives were only employed by the archaeological project at the end of my research.

Household and Family #3

Family Three's household consisted of the husband, the wife, and seven children (five girls and two boys). Family Three contributes to the wealthy sample of my study. The husband was employed by CONAFOR, received governmental aid, owned and partly operated a *tienda*, and sold surplus crop from his *milpa*. The wife received governmental aid as well.

Members of Family Three reported that there were no real times designated for meals because individuals eat or cook for others when they are hungry. In all honesty, this is the case for most Lacandon individuals based on observations, although my four families reported specific meal times in interviews. Breakfast was typically eaten anytime from 6am to 9am; lunch was eaten from 1-3pm (however, the daughters employed by the project ate earlier because of their lunch period); dinner was typically served around 7-8pm. All family members snacked throughout the day, and their snacks usually consisted of fruit, chips, cereal, and other foods bought from the *tiendas*. Food was eaten from the *milpa* when it was in season. If the family was out of food in their home, *milpa*, and *tienda*, they would travel by the family vehicle to nearby large towns like Ocosingo or Palenque. Smaller nearby *ejidos* possessed the same foods they sold in the family *tienda*.

The young children ate softer foods than the older children and adults since their

teeth had not fully developed. Kids also did not eat spicy foods. Such foods as they did eat consisted of vegetables like tomatoes, potatoes, achiote, and soups. Once children were at the ages of 7 and 8, they ate the same foods as adults. The males and females ate the same foods and at the same times. The girls in this family would cook what they wanted to eat unless everyone was eating the same thing, then only one person would cook.

Breakfasts typically consisted of beans, eggs, potatoes, achiote, soup, coffee, or Bimbo brand sweet bread. Lunches typically consisted of chicken, tortillas, rice, or soup. I noticed that cooked meat was re-used for meals until it was finished. Dinners could typically consist of fried fish, crawfish, or an egg soup (which they also claimed is traditional and has mint as an ingredient). In addition to the meals prepared for the family, the children had convenient access to the consumer food products in their father's *tienda*. I even discovered that the diet of one of the sons had been altered as he started to refuse eating the usual beans and eggs for breakfast and would only eat cereals like Corn Flakes. The family drank real fruit juice, Zuko (powdered drinks), soft drinks, water, coffee, bottled *horchata*, and *ma'ats* (a sort of corn soup). Men often drink *ma'ats* while working in their *milpas*. The young boys also drank *ma'ats*. The family rarely ate game one to two times a year, such as squirrel, turtle, peccary, and deer. The eldest daughters recalled enjoying toucans when they were younger; however, they claim it had been illegal to kill toucans for about ten years.

The wife and eldest daughters primarily cooked the family meals. The order of this task goes from the mother and down in age to the youngest-able daughter who was 11 years old. It is usually only necessary for one person to physically cook at a time. The

older daughters prepared their own meals when they were hungry. Chicken or fish were eaten at least once a week. The women kill and prepare their own chickens, the husband caught fish from the lake, or purchased chicken and fish in Palenque. Food was also purchased in the nearby village of El Tumbo, and items like canned tuna or sardines were bought from the other local *tiendas* if they had run out. Two of the eldest daughters reported liking *bistec*, a cut of beef, as well as fruit or vegetable salads, which is a Westernizing trend. In these preferences, they were clearly influenced by their time in larger towns. Salads are not a part of a "traditional" Lacandon meal, which always consists mostly of tortillas, beans, and large tamales filled with chicken, and various vegetables. Such tamales were prepared on several occasions during my research. The daughters claimed that the tamales could also include snails, crawfish, beef, or pork as well. The wife in this household knows how to make traditional Lacandon food, although she is Tzeltal Maya and was not raised in the community.

The wife pays for most food and her husband only contributes when he wants to when shopping in Palenque or El Tumbo. She revealed that she received 800 pesos (about \$66.00 US dollars) every two months from the *Opportunidades* program. Two of her children got 200 pesos each (about \$16.00 US dollars) every two months, which totaled 1,200 pesos (about \$100.00 US dollars) in *Opportunidades* payments every two months. The husband received 4,000 pesos (about \$333.00 US dollars) every two months for his position at CONAFOR. He sold the corn he grew for extra income and owned a tienda. He also gave community members rides to the nearest intersection outside of Mensäbäk where it is possible to catch public transportation for 100 pesos (about \$8.00 US dollars) per route. The father used his income to stock his *tienda* and all of his

children often ate foods from their father's store like chocolate, gum, chips, and sodas. This man's daughters paid for the foods they got at their father's store while it did not seem like their two younger brothers were required to pay for the *tienda* food they consumed. This was likely due to their young age and not male bias.

Family Three's *milpa* was one of the ones I observed that still had un-harvested corn. This was likely due to the fact that the husband hired laborers to tend to the plot, only weeding himself every two weeks and because he had a largest milpa under cultivation out of the four households' *milpas* I visited. This *milpa* had been planted with corn, beans, tomatoes, bananas, papaya, and onions. The husband also sold his corn to local *ejidos*, but I was unable to find out whether or not he received money from PROCAMPO for cultivating corn.

One unusual event sponsored by the father of Family Three was a graduation party in another town for one of his older daughters. It is unusual that Lacandon children attend more than primary school and the head of Family 3 allowed his older daughters to live in a neighboring town for secondary school (after much reluctance), although the daughters funded their education themselves. This party consisted of family members and the archaeology project members. For the feast, chickens were bought from a different *ejido* named Chancala. The meal consisted of whole chicken pieces in mole sauce, served with rice, real corn tortillas, and Coca-Cola. A cheesecake was served as well that was bought at a supermarket in Palenque.

Household and Family # 4

Family Four's household consisted of the husband, wife, and three children, all of

whom were girls. The husband's sons from a previous marriage lived in a separate compound near their mother. Family 4 contributed to the wealthy sample of my study. The husband was employed by CONANP, received governmental aid, and sold surplus crops from his *milpa*. The wife received government aid as well.

In my interviews, the wife of this family said that breakfast was typically eaten around 8am; lunch was served around 2pm; and dinner was typically eaten around 7pm. The family members typically snacked throughout the day, eating treats such as cookies, chips, oatmeal, sweet and non-sweet breads, and drinking juices, sodas, and *liquados* (a Mexican drink with real fruit blended with either milk or water). The wife in this household made a unique claim that the daughters get to eat different meals from each other of their choice. However, from my observations, the children seemed to be eating the same meal that was prepared for the family.

Meat was eaten in this household several times a week. This consisted of beef, chicken, fish, but no game because the husband does not hunt in his milpa. Fish was eaten about once per week and came from the nearby lake.

A typical breakfast consists of rice, beans, tortillas, and coffee. Fruits such as apples, cereal, and mangos may also be eaten at breakfast. During lunch, the wife prepares vegetables such as potatoes, achiote, and tomatoes alongside eggs and potatoes. A typical dinner would be chicken and rice, although they reported a fondness for beef with lime, when they have it. The wife's favorite food was chicken.

The wife in this household knows how to make "traditional" Lacandon food (like the large tamales), although she is Tzeltal and from outside of the community. She was the only community member I witnessed making *alpondiga*, which was like a meatball

soup that could be made of beef or game, but the particular dishes I saw her cook contained beef, rice, tomatoes, potatoes, achiote, and cilantro.

She did buy food from the *tienda* closest to her house when the food from Palenque runs out, but not the *tienda* owned by the husband of Family Three. This family also purchased fruits from the neighboring *ejido* El Tumbo. Something interesting was that the wife in this household was aware of water sanitation because she claimed she boiled her water for safe consumption. She was the only wife I had seen do this. She cooks alone because her eldest daughter is only nine years old, although this child was old enough to cook by Lacandon gender expectations.

The foods they cultivated in their milpa included beans, squash, corn, yucca, sweet potato, and papaya. The husband in this family did pay for food and the wife also *Opportunidades* for her children. The husband bought food for the family from the Super Che superstore in Palenque. The husband worked for CONANP, in the highest-salaried position in the community, and also received stipends from PROCAMPO for selling corn.

The husband of Family Four had two milpas. One milpa consists solely of corn and beans. I visited the other *milpa* where there were crops of sweet potato, yucca, cane sugar, pineapple, papaya, bananas, and green onions. He claimed that their corn had not run out in the first milpa. This family also had a substantial household garden with bananas, peanuts, zapote, yucca, achiote, and an herbal medicine that the wife explained was for her husband's diabetes. The husband did not tend to the *milpa* himself and hired laborers for this task.

3.5 Further Comments on Dietary Results

There are three *tiendas* in the community, and a new one was being built during my time there. The owners of these *tiendas* were among the wealthy members of the community. All three *tiendas* offered the same products that were purchased from stores in Palenque or by franchised brand distributors, like the Sabritas Company. The following is an inventory of the combined foods that the *tiendas* sold during my research:

TABLE 3.6 Summer 2011 Inventory of Mensäbäk's Three Tiendas

Black beans	Gum
Candy	Mayonnaise
Chili	Pasta shells
Chips	Powdered fruit-flavored drink packages
Chocolate	Ramen noodle cups
Cookies	Rice
Crackers (regular and sweet)	Salsa
Eggs	Sodas
Fruit-flavored drinks	Sardines
Instant coffee	Sweet pastries/breads
Instant tortilla mix	Tuna

Families consistently purchased foods from the *tiendas* that were closest to their family compounds in the community. The three families that owned *tiendas* would only use foods from their stores. When their own supplies ran out it was necessary to make another trip into town.

McGee noted in his research that Lacandon individuals would sometimes purchase foods from traveling vendors (2002:113); this is a reality for the community of

Mensäbäk as well. I witnessed families purchasing sweet cakes and breads from a traveling *panaria* or bakery vendor. I also saw members from Family One and Two purchasing produce from a traveling vendor during a time when the produce they purchased were not yet available in their own milpas. Also still consistent with McGee's (2002) observations, beans and tortillas are still a staple of Lacandon diet. Those who have the corn in their *milpas* make *hach wah* or "real tortillas" with real corn. The women in Family One and Two were almost always making tortillas using *Maseca* since their family *milpas* were out of corn. Members of the wealthy family sample in the community stated that they always or usually make real corn tortillas and do not like the taste of Maseca. Additionally, contrary to McGee's (2002) earlier observations, it seemed that in Mensäbäk game was no longer a part of diet. During my fieldwork, I never witnessed a family preparing hunted game for meals. The only locally acquired fauna prepared for meals were fish from the local lake. There may be various reasons for this: much game is conserved and now illegal to kill; many men now have salaried positions and either rely little on milpa yields and game in theory as they can now purchase food; and salaried and wealthy men have hired laborers to tend their *milpas* so they rarely spend time in their plots where leisurely hunting usually occurs.

I found it interesting that informants often neglected to report the commercial beverages that they consumed. From my observations, the families often drank instant or powdered drinks like coffee, Tang, *horchata*, milk, chocolate milk, etc. I do not know if this is because they felt that mentioning these commercial beverage products was less important than reporting the solid foods they consumed, or whether they simply forgot to divulge this information. Every Lacandon household that I visited used Nestlé's brand

NIDO® powdered milk for adults and NIDO Kinder 1+ for young children. NIDO® Kinder 1 + states on its packaging that it is a poor substitute for breast milk (www.nestlenido.com). Nestle NIDO® certainly is not a nutritious substitute for regular milk or a mother's breast milk, but I am not sure that Lacandon mothers were aware of this fact.

Coca Cola and a few other large franchised brands dominated the Mensäbäk tiendas. Gamesa, which is owned by Frito Lay (which is owned by Pepsi Co.), is a brand of cookies and pastries that is popular across Mexico and well liked by Lacandon consumers. Similarly, the largest Mexican potato chip company is Sabritas, also owned by Pepsi Co., and these are also a popular Lacandon snack. Interestingly, the Lacandon refer to chips of all varieties and brands as "sabritas," which attests to the marketing power of this product. Nestlé manufactures the powdered milks and coffees that the Lacandon consume and which are found in stores across Chiapas. Mexico has entered the global food brand market with their mega company Bimbo Group, and many Lacandon also consume Bimbo products, such as sweet cakes. Similar to the Hostess brand in the United States, Bimbo specializes in the manufacture of breads and pastries. Although an easy source of calories, such products, because they are higher in sugar, fats, and highly processed grains, are not as healthy as the Lacandon diet described in older ethnographies seemed that centered on fresh produce from milpas, fish, and game.

Generally, it seemed that my informants, like many Americans, were "junk food junkies." I inferred this from their constant consumption of cookies, potato chips, and other snack foods despite the possible detrimental effects to their health. A group of dentists invited by the project to provide people in Mensäbäk with dental care (in

conjunction with bioarchaeologists invited to examine the human remains present in religious shrines) struggled to convey to parents the importance for children to brush their teeth. Adults and children frequently exhibit poor dental health. The smiles and laughs of many children revealed teeth ridden with caries and most adults are missing teeth. Oral hygiene has not been a part of Lacandon tradition as we practice it in Westernized societies. Yet, simply because the Lacandon did not consume artificially sugared foods in the past does not dismiss the possibility that they exhibited poor dental health then also. Corn was the staple of Lacandon diet and the very fact that ground corn left bits of stone in the food would have been extremely abrasive to teeth and their enamel. It is likely that the Lacandon had poor dental health due to this, but we lack the dental records. However, community members' frequency of carries today are attributed to their new junk diet.

It was rare that the Lacandon drank water or milk with their meals as Americans sometimes do during meal times. Aside from coffee, juice drinks, and *posole*, the primary beverages were soft drinks and powdered sugar drinks like Tang. Their cultural preferences contributed to their high consumption of high sodium and sugared drinks. When asking an informant from Family Two's compound whether she liked sodas, she replied "Yes," with the return question whether I did as well. When I responded, "No, I don't really drink them," she asked "Why?" to which I flatly stated that they are "full of sugar and bad for your body and health." The level of visible shock and her response of "Really???" made it evident that she was not aware of the effects soda can have on health.

Wealthy members of the community also seemed unaware of the low nutritional quality of the snack foods they consumed, so lack of dietary education was not solely limited to the poor. One member of the wealthy Family Three relayed to me that the un-

carbonated and orange-flavored Big Orange drink, a sister beverage of Big Cola that is supplied from Vietnam, was "Good for you because it has orange juice." The beverage possessed a high sugar content and a very small portion of real fruit juice. Her claim was undoubtedly based on the packaging which marketed the product as containing "real orange juice," despite that the nutrition information on the back proved that this was hardly the case. A member of this same family also boasted that the chocolate-flavored powdered beverage Cal-C-Tose® was really good for children because it "makes kids smarter" as the packaging suggested depicting the figure of a child with a mortar boardstyle graduation hat standing in front of a chalk board. The package claims that a glass of the beverage provides seventeen minerals and choline, an ingredient the product says is essential for the normal functioning of cells; yet, with the exception of 80 percent of one's daily value for Vitamin C and Zinc, the nutritional information shows that the beverage is low in the other vitamins listed and contains only 55 mg choline per serving, which is 10 percent of the daily value for choline (550 mg; www.cal-c-tose.com). It would seem that many of the commercial food products that claimed health benefits were misleading to the literate Lacandon when I personally compared such statements to the actual nutritional information provided on the back of the products (based on a 2,000 daily calorie diet similar to ours in the United States). On one occasion, however, one member of Family 3 did note that it was healthier to cook eggs and other foods on plantain leaves because there would be less oil and fat, which testifies to some knowledge of nutrition and health.

From the study of these four households it is clear that the wealthy households overall enjoyed the consumption of either fowl or meat several times a week. The poorer

households lacked this luxury and could go well over a month before eating meat. If they did consume meat, it was typically fish that were caught from the lake because they could not afford to kill their chickens and lose the egg production. However, this is not to say that the poorer households lacked protein as they did consume fish, eggs, and beans. The amount of meat the families consumed depended on their material wealth. Overall, the wealthy households enjoyed healthier and more wholesome meals when viewed from Western perceptions of proper and necessary daily food groups, as the poorer households made due with available resources. The poorer families were also the main patrons of the community *tiendas* that provided all junk and processed foods, while the wealthy families had vehicles and money to go into larger *ejidos* or Palenque to purchase meats or produce when they lacked it. Larger discussions of health and wealth disparities will be presented in for future research in the concluding chapter.

3.6 Dietary Consequences Shaped by Current Material Conditions in Mensäbäk

Value and ideology are not the scope of this materialist-minded analysis outside the point that the new Lacandon economy has clearly caused a change in individuals' attitudes and behaviors as they experience an intrinsic drive for profit and wealth or the despair of poverty. I will not argue that the Lacandon prefer commercial food products because they perceive a connection to elite or Westernized consumption patterns, but rather that they consumed these products because of their availability thanks to the stocking of locally-operated tiendas with globalized fast food commodities. Food is not just linked to human biology: food reveals much about a culture's resource management and production-

distribution-consumption patterns (Bruegel 2011:42). The new Lacandon diet is mirroring their proletarianization.

When a county's policies and economic structures discourage traditional farming, people tend to switch to wage labor or cash cropping that requires them to purchase more packaged, processed, commercialized food products. Mexico's economic liberalization and global integration have created a system that jeopardizes survival in rural populations and has proved threatening to their agriculture and nutrition (O'Brien 1998:96). From the mass use of grain and fish as animal fodder, the development of junk foods, and the replacement of mother's milk by formulae; the more "modern" the Mexican economy has become, the worse off the nutrition of its poor, rural citizens (Escudero 1991:9-10). McGee recalls that the Lacandon move to commercialization came at the expense of milpa agriculture and food production; the result was "an increase in the purchase of prepackaged foods to supplement the decline in traditional crops" (McGee 2002:112). Franchised brands like Frito Lay and Coca-Cola have infiltrated Lacandon communities, and in some cases have become the daily aspects of children's diets. It is known that although such (essentially junk) foods are highly caloric, they are also nutrient-poor and can result in the deterioration of bodily health. This can only be determined by actual health measurements.

Even though poor families depended on *milpa* crops more than wealthier families, I observed that the wealthier families on a whole were able to eat healthier meals. They were able to afford meat or to kill their own chickens on a weekly basis, opposed to some of the poorer households who rarely had this luxury. When poorer families ran out of crops in their *milpas* they were forced to purchase packaged beans, rice, and tortilla-mix

for meals from the community *tiendas*. I also observed the poorest families of the community as the most frequent patrons of the *tiendas*, largely buying junk food products that are deleterious to one's health. On a whole, Coca-Cola and other sodas were consumed more than water or milk.

We know this to be true in the US today as well, where mostly the wealthy afford high-quality diets. As the Lacandon enter a capitalist economy, their diet conforms to the economy. Those who run out of produce in their *milpas* rely on packaged substitutes found in the local *tiendas* and the wealthy members of the community have the luxury of living off surplus crops or have the means to travel to larger towns to purchase produce and meat. The differences in families' diets are determined by income, but also by access to good-quality foods; however, this is still linked to income. I did not encounter any of the families during my research to be outright starving and the poorer families did have diets high in calories from packaged and sugared foods, yet the point is that they did not enjoy the same quality of diet as wealthier community members.

Referring to poor-quality diets, I witnessed one dangerous episode concerning diet and hygiene with a child in Family Two. This child was a constant consumer of junk foods and sodas throughout the day. A team of dentists working with a bioarchaeologist as part of the archaeological project in Mensäbäk gave this child extensive dental treatment. However, he experienced a serious infection due to his lack of oral hygiene and diet, and developed a dangerous abscess in his jaw after the removal of an infected tooth. For most of the summer, he had a visible protrusion the size of a golf ball behind his chin from the abscess. Throughout their time in Mensäbäk, the dentists monitored his infection because they feared it could be fatal if it entered into his blood stream. The new

fast food diet has not come with a new call for oral hygiene among the Lacandon. From my interviews it was evident that the Lacandon were not aware of the health risks that could develop out of some of the foods they consumed.

On a personal note, although beans and tortillas were the staple of my own diet in during my fieldwork in Mensäbäk, my diet was also heavily supplemented by commercial foods that followed other Lacandon consumption patterns. The archaeology project members hired local women to prepare breakfasts and dinners for team members; lunch was one's own responsibility. The project's food was bought in the town of Palenque during supply runs every one to two weeks and we often had the luxury of eating purchased chickens. However, other than the times I ate with project members or in Lacandon households for meals, I found myself following the local pattern of purchasing junk foods from local *tiendas* for snacking or to cure my sugar cravings. There was never a *need* to purchase these foods, but merely the desire. This was highly irregular for me as I rarely eat such junk foods or consume sodas at home. Sometimes I would tell myself that a soda was a result of stress or a treat; however, such nutrient-poor foods became an everyday reality during my fieldwork. Although I am not aware of other project members' consumption patterns, junk food was a reality during their fieldwork as well. We would often select junk foods while on project supply runs in Palenque, such as Mexican Mamut chocolate and cream cakes. Despite the quality time outdoors and exercise that I experienced during my fieldwork in Mensäbäk, overall I can say that these unhealthy additions to my diet often made me feel somewhat ill and produced low-energy levels. Despite a high level of physical activity in the field, I gained weight while in the field.

3.7 Conclusion

My data from Mensäbäk in 2011 shows that the Lacandon have experienced a significant change in diet from the past that is driven by the economic changes in their community. Their consumption patterns no longer derive only from *milpa* yields and game and they have integrated commercialized foods into a large portion of their diet. This became possible in the community of Nahá through Lacandon participation in the tourism industry. In Mensäbäk, community members can purchase foods from *tiendas* or larger towns with their salaries or government stipends. The changing Lacandon diet is a part of the larger pattern of culture change that arises from their changing economic situation.

CHAPTER 4: CULTURAL CHANGE IN MENSÄBÄK

4.1 Introduction

The previous two chapters discussed changes in the Lacandon economy and diet that has occurred over the last four decades. The changes were voluntary and brought about in conjunction with increased influences from the outside world. These changes have also affected Lacandon culture overall and have changed relationships within marriages, family, and the community as a whole. This chapter will discuss the wealth disparities among Mensäbäk members that were created by differential access to the government salaried positions and stipends received by some community members but not others. I will also discuss community members' opinions of each other that will demonstrate how these disparities have created tension/conflict between members of the community. One section will discuss Lacandon sentiments as another cultural change from the new local economy. Much of this chapter will contain a materialist analysis of my data.

4.2 Capitalistic Modes of Production and Consciousness

Karl Marx saw that a capitalistic mode of production created wealth disparities and these disparities were the source of social conflict. Wealthy and poor members of a given society are may have different needs, but both desire to be richer. Consequently, the introduction of capitalism creates the potential for conflict between the rich and the poor.

The same level of conflict unlikely existed in more egalitarian subsistence farming communities. However, I am not naive and am quite aware that perfectly egalitarian (seemingly utopian) societies have never existed and that individual members of any group can desire more, be biased or selfish: self-interest is a universal human attribute. Although the Lacandon in Mensäbäk are slowly becoming integrated into the global economy and a capitalist mode of production, they have a long way to go before closely mirroring US or even Mexican economies. Yet, I discovered during my research that this community is already experiencing a change in their notions of "community" and kin relations, substituting the old kin-based subsistence production with one centered on increasing individual material wealth.

Marx noted that historical changes in production were accompanied by changes in human consciousness (Marx and Engels 2012:61-62 orig. 1845-1846). With Mexican leaders introducing new neoliberal economic policies and the restructuring of the country's economy, the Lacandon are being pulled into a capitalist mode of production. Since the goal of capitalism is profit and it is impossible for all members of society to reap an equal amount of profit under this mode of production, conflict and personal struggles are created by the material conditions of capitalism. Although the Lacandon appear to be isolated in the forest, most have now become petty capitalists who are active participants in the global economy, choosing to cease or limit traditional subsistence activities for wage labor and an increasing desire for material goods. The current situation is the result of both larger structural forces at work in the Mexican economy and Lacandon free agency.

4.3 Changing Community Dynamics in Nahá at the Turn of the Twenty-First Century R. Jon McGee (2002) noticed changes in community and family relationships as Lacandon families in the community of Nahá began to shift from subsistence farming to commercial activities in the 1990s. Regarding gendered relationships specifically, McGee witnessed the interdependent relationship between a husband and wife deteriorate when households became dependent on cash income (2002:106). Women's activities such as weaving and preparation of *milpa* crops were invaluable in the support of farming households. However, the value of women's labor depreciated in Lacandon families with access to manufactured clothing and store-bought prepackaged foods as women lost their productive responsibilities. As their activities were limited to childcare and meal preparation, they were unable to enjoy the same level of power and prestige as their male counterparts who earned incomes working in jobs outside of the community (2002:106). However, recall from Chapter 2 that McGee did find that "nontraditional" wives who helped their husbands in the sale of crafts were sometimes given the responsibility over household finances because of the men's fear that they would waste the earnings or manage them poorly. McGee also notes that unlike agricultural produce, which is shared, one's wages are often seen as one's own (2002:106), which may account for some of the more individualistic behavior of Family 3's head of household in regards to providing for his family.

McGee (2002) also discusses the changing nature of reciprocity under a new economy. In the past, several households in a family compound practiced reciprocity; men would help each other make *milpa* when one was short-handed or incapable and game was also shared with other households. McGee argues that reciprocity in subsistence economies reinforces social networks and insures against starvation in cases

of crop failures or environmental disasters (2002:114). This type of relationship is no longer supported by the new commercial economy. Individual profit replaced reciprocity in this new mode of production. McGee witnessed families aggressively competing with other Lacandon families in the sale of tourist crafts in the archeological zone of Palenque (McGee 2002:115). McGee began to note dramatic differences in the way families displayed material wealth in Nahá. He pointed that items such as a televisions or furniture cannot be shared with other family members within the compound as was food and labor in the reciprocal model of the past. A decade ago, McGee also witnessed the growing jealousy caused by the accumulation of material wealth among some individuals in the Lacandon community of Nahá, and felt that this increase of personal wealth and lack of reciprocity might in time lead to the development of social stratification among the Lacandon Maya (2002:115). This is happening now in Mensäbäk.

4.4 Wealth Disparities in the Community of Mensäbäk

The switch in the Lacandon economy from farming subsistence for consumption to participation in wage labor created a divide among community members in terms of access to resources and wealth. The income and dietary data of the four-household study from the previous two chapters exemplify this in that families do not have access to the same government positions; therefore, they do not all have the same level of income to purchase packaged foods or material items. Also, recall that the recipients of wages or stipends from the aforementioned governmental programs were determined through cross-referenced interviews. Since Lacandon families now receive money from a variety of different government programs, this has created differential wealth and access to

resources in the community. The wealthier families were given more opportunity with the new employment than the poorer ones because they could acquire the necessary documentation and might have had more influence with governmental officials. For example, the new community police come from the wealthiest families in the community. The richer heads of the community hold all the top-salaried positions funded by CONANP and CONAFOR.

All families in the community receive a little aid from the *Oportunidades* program for at least one child except for the two poorest families because they cannot afford to procure the birth records necessary for participation in the program; Family Two is one such household. In addition to their milpa crops, the poor families of the community rely mostly on the three local stores that are operated by three wealthy families. In fact, the poor families of the town were much in debt to the rich families of the community in this regard.

The poor households did not have the same access to resources as the wealthy, such as positions in the top-salaried programs. The already wealthy households were able to increase their material wealth through the wages they received, increasing the financial gap between members of the community. The richer households of the community were also able to hire laborers to tend to their *milpas*, which allowed cultivation of larger milpas, higher crop yields, and the sale of larger surpluses. The wealthier households had better access to food generally, whether it was through their *milpas* or their ability to purchase food in the event that they had run out of certain items. The wealthy members also owned vehicles, which provided easily travel to Palenque and other communities, and were sources of income. With little access to transportation, poorer members of the

community had to pay for rides to town or to the *cruzero*.

Further, the heads of the two wealthy families are leaders of the community. When outsiders propose development projects or opportunities for work, they come to these men and a couple of other leaders for advice. This gives members of the wealthy families a competitive advantage to control any new jobs that come into the community. For example, when the archeologists running the Mensäbäk Project were looking to hire members of the community, they first consulted with the male heads of Families Three and Four. These two men suggested who the archaeologists should hire (personal communication from R. Jon McGee).

4.5 Attitudes in Mensäbäk Concerning Wealth Disparities

Lacandon perceptions of wealth and poverty in Mensäbäk have changed as a result of participation in wage labor through government-sponsored programs. In the past, the Lacandon probably did not see themselves as poor as people do in more industrialized societies. All households in the community supported themselves by milpa farming and virtually every one else in the region lived the same way. However, with the new Lacandon economy, inequality has sprung up and many individuals in Mensäbäk have come to view each other differently.

I will begin by discussing my informants' perceptions of changing wealth dynamics, starting with a poor family's opinions of wealthier ones. During my time in the household of Family One, I came to discover that one of the young daughters has a tumor and a large mass was observable on her forehead. The mother told me that her husband

was notified by a doctor that his daughter would die if she did not receive an operation. The wife explained that her husband felt his daughter would die if she were to receive surgery and decided against the operation. The wife also claimed that daughter had, what I interpreted through her explanation and the girl's symptoms and physical appearance, as a sinus and bronchial infection. I am unaware whether this is connected to the girl's tumor. The mother added that she wanted prescription medication for her daughter, which she did not receive on her last visit to town for this matter. She wanted to buy the child Broncholin, which is a Mexican over-the-counter cough medicine, possibly since it was easier to acquire or cheaper than the prescription. The mother claimed she had needed a ride to town to see the doctor since this family lacks a vehicle, so she asked the husband in Family Four (a wealthy family) for this ride. She claims he repeatedly said that he did not have the time despite the fact he made weekly trips into the town of Palenque where the hospital is located. The wife reported this with a visible level of frustration, and she further commented on wealth disparities saying that this same head of Family Four was keeping the community ambulance for himself (the ambulance will be explained in the subsequent chapter) instead of using it for the health of the community, which was its purpose. The mother also claimed she needed the help of someone who spoke Spanish, since she is of an older generation and is not fully bilingual, but that none of her friends would help her.

It is very possible that this story was told to me in hopes that I would intervene.

There were many occasions when the members of this family asked me for monetary help or material items when I went into Palenque. However, Family Four is in Family One's patriline, and it is interesting that the husband did not help if it indeed was the case.

Again, changing kin relationships are a product of this new economy and cultural change. The father's feelings about his daughter's tumor may be further explained in the upcoming section of this chapter.

What I found most interesting out of my four-household case study was that although two households represented the impoverished members of the community and the other two households represented the wealthy, all four households individually expressed different results in terms of male responsibility in providing for their families. Starting with Family One, the wife constantly complained about not having money to buy anything, a claim that her daughters also repeated. I asked if she paid for the family's food and if so, did she use funds from *Oportunidades*, for that purpose, to which she said yes, but that she had not received that money recently. At this point, the women in the community had already received their aid two days prior, but this mother still held that she had not receive hers. Although she complained of financial complications, I observed that there were beer cans littering the floor from her husband's drinking; this was a constant observation in this household during the same times the women were claiming they had no food or money to purchase food.

The husband in Family One's household receives stipends from programs 70 *y mas* and PROCAMPO. The wife reported that she received money from *Opportunidades*. The fact that this husband also hires laborers to tend his *milpa* further demonstrates that some monetary flow exists within this family. The husband claimed that he did not sell his *milpa* crops during my visit to his *milpa*, which was false as his wife and other families reported that he did indeed receive money from PROCAMPO for the sale of his corn. When asked if the husband helped to pay for food, the wife reported that he did

only sometimes. Yet, knowledge of the programs from which this family receives money do not really support their barrage of complaints concerning a lack of food and money. I personally understood that the father did not feel that his income should necessarily be used to support his family besides the yield of his *milpa* and occasional monetary aid with food.

Despite a law against the sale of alcohol in the community, beer was sold by one of the wealthy families. Although most men in the community households consumed beer to some extent, it seemed to affect the poorest families the most. On several occasions during my fieldwork, I heard drunken yelling in another poor household, and one evening after a domestic disturbance the husband in this family was arrested by the community police and placed in a holding cell until he sobered up the next day. In a superstore in Palenque, a six-pack of beer, even local brands, sold for about the same price we pay for one in the United States. After the prices are slightly inflated for sale within the community, beer represents a significant expense for poorer Maya families whose incomes are much lower than those in the US below the poverty line. In my observation periods I found Family One to really lack basic necessities, such as food, and I personally believed that the husband's purchase of and consumption of alcohol was a higher priority than providing food for his family based on the frequency of beer cans in the household. However, it is also quite possible that their claims they lacked of food was a strategy to get more compensation from me. This is the same family that claimed they had no money for their daughter's medical care.

The husband in Family Two was not receiving aid from any governmental programs and did not have wage work during my research. His wives did not receive

government aid either, but they were employed by the archaeology project near the end of my research. Although this family sold tourist crafts and the husband and sons were sometimes seen giving visitors a tour around the lake, it was unclear where the husband's money came from, or whether it were merely savings from a past salaried position (PROFEPA). The wives claimed that their husband provided the family with food, and it is likely that the funds gathered from the sale of crafts aided in this task. Despite the fact that this family household was arguably the most impoverished in the entire community, I found it interesting that the husband seemed very generous in providing his children and wives with money to purchase what they wished from the tiendas as they were almost daily patrons at the stores. I also rode to and from Palenque with the wives and husband of Family Two by *combi* to observe their city shopping. They bought items such as clothes or cooking wares. When a traveling vendor came into town to sell Mexican clothing, the husband also provided the wives with money to purchase some items of their choice. Although money was not abundant in this family and there was constant complaint of a lack of meat and some food items like corn or eggs, the husband still provided his wives and children with money to purchase junk foods and material items.

Family Three was part of the wealthy sample of my study. The husband of this household was employed by CONAFOR, received government aid, owned and partly operated a *tienda*, and sold surplus crop from his *milpa*. The wife received government aid as well. The wife reported that her husband sometimes purchased food for the family when he went into town. One daughter reported that her father was helpful in paying for electricity and gas; however, he did not support this particular daughter's wish to go to school and she was working for the project to pay for her education. A different daughter

was more critical of her father, claiming that with how much money he made, he should be helping her mother more in providing for the family. She asserted that her mother paid for almost all of the food and furnished the children with material items, such as clothes, with her governmental aid. I found this interesting as the wife told me in conversation that her husband wanted more children, but it seemed he did little in providing for his existing seven children, with the exception of his two sons.

From my time spent with this family, I observed that it was the daughters and wife who largely operated Family Three's *tienda*, but they did not receive money from sales and also had to pay for the food they consumed from the store. The wife was also required to pay for the majority of food she prepared for her family. From all my encounters with the husband of this family, I perceived that he was greatly occupied with accruing material wealth. He frequently asked project members for their personal items and equipment and made numerous requests of archaeologists for items from the US. A majority of my conversations with him were centered on materialism in some fashion. I found it personally frustrating that besides gifts, I had purchased collars for his dogs at his request, and he later took advantage of me by raising the price we had agreed upon for a ride to the *cruzero* to catch a *combi*.

The husband of Family Four was much like the husband of Family Two in that he was willing to provide food and the material items that his family desired. Referring to his own childhood, the husband of Family Four said he wanted to make sure that his children had all they wanted and did not go hungry as he had the means to provide for them. The daughters of this household displayed more material wealth in terms of clothing, personal accessories, toys, and books than any other household in Mensäbäk.

This household also contained a nice flat-screen TV that constantly played children's cable shows, such as those from the Disney Channel. The husband reported that he received wages from CONANP and stipends from PROCAMPO. The wife received aid from *Oportunidades* that was used to furnish food and clothing for her children, but she reported that her husband paid for food. It was evident from my interviews and observations within the family that this man was generous in using his wealth to support his family.

Although Families Three and Four received only mild criticism from poorer Families One and Two, it was evident that the dynamics of wealth in Mensäbäk were beginning to cause some social tension. The poorer families of Mensäbäk clearly did not have access to the same sources of income as the more well-to-do families. The topsalaried positions in the community were already held by leaders of the wealthier families in the community and they used their positions to steer resources to their own family members. The poorer members of the community were also inhibited from traveling into town to accrue more material wealth or resources since they lacked transportation or the funds to pay wealthier members of the community for rides to the bus stop. Although this did not prohibit members of poor families from traveling, it made the transport of goods to sell substantially more difficult and reduced the volume of materials that a poor family could transport for sale or trade. The husband of Family Three acknowledged that there were "poor" members of the community, yet I saw him charge these same individuals one hundred pesos, almost a day's wages for the project, for a ride to a neighboring ejido although he was already traveling there for his own purposes. In this manner and through inflated prices in their tiendas the wealthy members of the community exploit the poorer

ones because the poorer members of the community have little choice in where they shop. Because the poorer families of the community rarely have the means to travel into town to purchase foods at city discount stores, they are subject to the price-inflation of community *tiendas* when the foods in their *milpas* are gone. Exploitation by certain community members can even be extended to members of their own families, which I argue is partly the case in Family Three where the father is unwilling to provide for his family and insists that they work in his *tienda* without pay and must also pay for its goods.

Comparing the changes McGee (2002) saw in community and familial relationships in Nahá in the 1990s when the Lacandon entered commercial activities and the intensified changes I saw with the Lacandon in Mensäbäk in 2011 during my own research, I too began to wonder whether the Lacandons' adoption of a wage based economy would further shape attitudes, conduct, and feelings in the future. Commenting on American life, Richard Wilkinson and Kate Pickett claim, "It is a remarkable paradox that, at the pinnacle of human material and technical achievement, we find ourselves anxiety-ridden, prone to depression, worried about how others see us, unsure of our friendships, driven to consume and with little or no community life" (2010:1). Listening to the personal testimony of the wife of Family One concerning her daughter's need for medical attention and witnessing the exploitation of poorer families in Mensäbäk, I wondered if the community is headed towards the same social struggles present in capitalistic societies.

It was axiomatic to Marx that those on opposite ends of the wealth spectrum have different desires in the sense that the poor want to be rich and the rich want to stay rich or

become richer and that this was a source of conflict, as the rich could not stay rich without the expense of the poor. As the disparity in wealth increases, so too does suffering. As income differences become bigger, so does social distance between classes. Such social strife is happening in Mensäbäk today as illustrated by the commentary of poor families concerning the actions of the wealthiest heads of the community. In the case of "wealthy" Family Three, the father's actions and self-guided choices were also criticized by his own offspring. This is not to say that Lacandon community and family members co-existed in perfect harmony under the swidden and kin/gendered mode of production before the 1980s; conflict can occur in even the most egalitarian of societies. However, I argue that while in the past, conflicts could have arisen over literally picking between the wrong apples and oranges, today the Lacandon are experiencing a different type of conflict based on the monetization in their new economy. The conflict today is no longer limited to crop failure or X beating his wife; it is centered on access to goods, jobs, and food. The conflict today is no longer localized within single kin units but seems to affect every individual in Mensäbäk.

4.6 Some Explanation for Changing Kin Dynamics

R. Jon McGee presents some information from his research that may explain some of the behavior exhibited between Mensäbäk kin and community members. As it was mentioned in previous chapters, in conjunction with making milpa, Lacandon men were also responsible for the well-being of family members through their religious practices. Today, men in Mensäbäk do not practice the past religion and *milpa* practices have

changed with the switch to wage labor.

McGee worked with the Lacandon in Nahá because of his interest in their non-Christian religion. The Lacandon were polytheistic, worshiping a pantheon of gods. At the start of his research in the 1980s, the men practiced agricultural and healing rituals (McGee 2002:125). By the publication of his book *Watching Lacandon Lives* (2002), only three individuals were practicing the old religion in Nahá. These rituals had become another product to be commissioned and filmed by tourists. The young men had shifted away from the old religion and traditional farming economy.

The men in the community had places where they would pray to their gods and make offerings called "god houses." They communicated with their gods through incense burners that were representations called "god pots." Offerings of copal incense, tamales, or a fermented drink were made to the gods by men in exchange for taking care of their families and crops (2002:138). Agriculture was fundamental to Lacandon religion. Family members' sicknesses or crop failures were attributed to displeasing a god who could only be appeased by offerings. Illness could be healed through prayer to the gods, therapeutic incantations, medicinal plants, and curing strings (McGee 2002).

When McGee saw the Lacandon enter a mixed economy based on farming and commercial tourism, the rituals associated with agriculture declined. He believes that the transition to a mixed economy was key in the demise of traditional religion. Rituals were abandoned as participation in the tourism economy was prioritized. Since households now had access to incomes, sick family members could seek medical care in private clinics in Palenque or San Cristobal and curing rituals were no longer necessary (McGee 2002:151). When Maler and Tozzer observed the Lacandon, they encountered a god

house among every extended family. When McGee arrived in Nahá in 1980, four god houses were in use; by 1999, there were only three (2002:138).

McGee points that although the Lacandon lacked a centralized political structure and functioned as an egalitarian society based on the autonomous household, "shared beliefs and communal practice of religious rites provided some measure of social cohesion" (2002:152). McGee believes that such a tie has been cut, and the new unifying force among community members was pursuit of tourist dollars. Much of what McGee found in Nahá may explain the behaviors of some community and family members in Mensäbäk as well.

Men were responsible for providing food from *milpas* and caring for their families through religious rituals in the past. Today in Mensäbäk, men receive wages and stipends through government programs. *Milpa* production is either minimized or taken care of by outside laborers and men no longer practice the old religion to help their crops and kin. The roles of men have changed from their switch to wage labor, as has their duties towards their families. The wages a man makes are his own, and men can choose whether to pay for food when their crops run out, or leave that as the responsibility of their wives. Since men no longer practice rituals to heal their kin during sickness, healing or payment for medical care are also outside their responsibilities. It would seem that husbands and fathers are becoming more independent from their families with new employment and wages and the egalitarian (yet still patriarchal) nature of this society in the past is diminishing as men can define their own level of involvement and aid in the household unit.

The father of Family One's dismissal for his daughter's surgery may have been for

a variety of reasons, but since the old religion is no longer practiced, the safe-guarding of his child in sickness is no longer his responsibility with the new economic change. Since his government stipends are his own, it is not his responsibility to help pay for his child's medical care. The same argument can be made for food: when *milpa* crops run out, it is no longer a father's duty to provide food for his family. In the testimonies provided by members of Families One and Three, it would seem that the men do not provide any aid to their families beyond *milpa* yields and the roofs over their heads. This is not the case for Families Two and Four, as the men provided their family with money to purchase food and other necessities. Yet, the level of a father's involvement in my four-household case study varied between both the wealthy and the poor households, and is not characteristic of either wealth spectrum. The level of providing for one's family seems to vary from individual to individual. This behavior could well be yet another product of the Lacandon's switch to a mixed economy.

4.7 Conclusion

This chapter demonstrates that due to a changing mode of economy, wealth disparities have been created between members of Mensäbäk resulting in new kinds of tension between community members. Community members viewed others on the opposite wealth spectrum differently and sometimes even negatively in interviews; this even sometimes occurred between family members of a single household. In addition, the new Lacandon economy has had some effects on diet as well. Today, the Lacandon are active participants in the global economy and capitalism, choosing to cease traditional

subsistence for wage work and now desire Western goods. This materialism has brought about new kinds of conflict that was not present before among more egalitarian agrarian Lacandon earlier in the twentieth century.

CHAPTER 5: CONCLUSIONS, DISCUSSION, AND FUTURE RESEARCH

5.1 Introduction

In this last chapter of my thesis, I first offer some concluding thoughts on my data to further the point that the Lacandon of Mensäbäk have experienced culture change on various levels as recent actors in the global economy. I next offer a cross-cultural example of the Machiguenga Indians of Peru where this same transition happened in a strikingly similar fashion. Although beyond the scope of this thesis to pursue, I believe that what I have witnessed in Mensäbäk is part of a larger transition that is occurring in indigenous societies around the world. I offer a discussion of Mensäbäk's new role in Mexico's growing tourist industry in the larger scope of their cultural change. I also offer my own reflections of my research as well as make some predictions for the future of Mensäbäk. I end the chapter my outlining my plans for future research given more time and training in medical anthropology and public health.

5.2 Conclusions from My Research Data

As I have shown in the information presented in Chapters 2 and 3 and the summation of Chapter 4, the Lacandon Maya have undergone significant culture change in the past few decades with the economic shift from *milpa* farming to wage labor which has encouraged their integration into the global economy. I demonstrated this change by explaining they

were first subsistence farmers that operated on a kin-based level, switching to a mixed economy of subsistence farming and commerce in Nahá in the 1990s to (mostly) wage laborers or recipients of government stipends in Mensäbäk in 2011 where family relations have become highly individualistic. The resultant culture change has had many effects on community and household relationships. I also showed that these economic changes have led to a decline in *milpa* production as food can now be purchased with wages and outside laborers can be paid to tend family *milpas*, which has affected diet.

Mensäbäk is just one example of how indigenous cultures are undergoing culture change as they are affected by globalization and integrated into the world economy. However, Mensäbäk adds to the trend of changing indigenous communities as they cease to reflect past "traditional" life ways and start to resemble societies much like our own. I did show in the previous chapters, that the new local economy and materialism has brought about a new nature of conflict among Mensäbäk members, but this is only because this kind of conflict could not be experienced previously under the old Lacandon economy. That is not to say that conflict never existed among the Lacandon in the past. Through interviews, I encountered anxieties among individuals concerning their own financial standing as well as others, commentary on behaviors that they felt stemmed from such wealth, and animosity towards other community members.

However, I can attest to certain "perks" of the Lacandons' integration into the economy. With money, one can obtain medicine if a family member is extremely ill; whereas in the past sickness would have been treated with prayer, sacrificial offerings, and curing strings (McGee 2002). Vehicles also allow individuals to enter town to purchase necessities they are lacking. A great example of this is the purchase of food if a

family is lacking food due to crop failure, whereas in the past a family could have starved or was forced to borrow from a different kin group. The most positive change I witnessed in 2011 was the employment of women in the archaeological project. The wives of households many enjoy some income through the *Opportunidades* stipend, but this was not the case for all women. However, the younger women of the community and the two wives of Family Two were able to receive wages of 150 pesos per day through their labor in the project. Many women were able to help purchase food if they were lacking with these wages. Several of the young girls claimed to save this money to attend school, as either their parents did not have the funds for this or refused to pay for their education. Several of the young women had aspirations of careers outside of the community, and one even wished to be trained in biology to return to the community and aid in conservation of the surrounding rainforest. This certainly attests to changing gender dynamics (the expectation of a woman to be a child bearer and housewife to aspirations of career woman) and may have some positive implications in the future.

5.3 A Cross-cultural Example of the Machiguena Indians of Peru

I believe that the Lacandon situation is common to most indigenous societies where people who live in kin-based subsistence farming communities become wage laborers. To demonstrate that the same process of cultural change exhibited in Mensäbäk has occurred elsewhere, I provide a case study of the Machiguenga Indians of the Peruvian Amazon. I chose this case because the Machiguenga Indians inhabit the same tropical geography as the Lacandon, practice swidden, horticulture like the Lacandon, and encountered the

same economic transition to a wage-based market economy.

This account is based on the research of Joseph Henrich (1997) who gathered data from five Machiguenga communities in over 20 years of study. The Machiguenga are an Arawakan-speaking people inhabiting the southeastern region of Peru. Traditionally, the Machiguengas had lived in single or small extended family hamlets and have subsisted on a combination of hunting, fishing, and swidden horticulture, much like the Lacandon. Also like the Lacandon in the past, the crops produced by their swidden practices provided most of the Machiguenga caloric-intake. These plots mostly provided maize, sweet manioc, and bananas (Henrich 1997:322).

Henrich showed that like the Lacandon, the Machiguenga were actively and enthusiastically engaged in the market (Henrich 1997:320). He found that in the case of Peru, the increasing availability of commodity markets coupled with Machiguenga desire for market goods rapidly transformed their traditional patterns of subsistence to an unstable mixed economy of commodity and subsistence production. Households raised surplus production by altering traditional practices, thus creating an economically, socially, and ecologically unsustainable system. Henrich emphasized that Machiguenga efforts to increase commodity production and market participation had created a rapidly deteriorating projection of sustainability because the intensification of their farming would lead to land exhaustion and soil erosion (1997:321). Henrich argued that the Machiguenga case study offers a way to understand how indigenous groups enter larger national and international economies (1997:326).

Around 1970, the Peruvian government granted land titles to Machiguenga communities within the peripheries of the Manu National Park reserve; this is near the

time the Lacandon were granted land in the Montes Azules Biosphere reserve. Like the Lacandon, the Machiguenga experienced Western influence through tourism and expressed a strong desire for Western goods. He point that in the 1990s, Machiguenga interest in Western goods was immediately apparent by their frequent inquiry of the cost and location of material items so that they too could acquire some. Henrich continued that he was barraged with requests for his shoes, knife, camera, etc. (1997:326). All these items were actually requested from me from one Mensäbäk community member or another, and I recall Jon McGee's story of a Lacandon man in Nahá being interested in his camera despite the absence of film or technology for processing it (personal communication with R. Jon McGee). Also similar to Mensäbäk, Henrich noted interviews where Machiguenga community members expressed anxiety or worry about their absence of material wealth or in acquiring a level akin to their neighbor's wealth (Henrich 1997:327). Henrich also points out that the less remote the community, the greater the market incorporation (1997:332). As a more isolated community, it is no surprise that Mensäbäk's integration occurred after Lacanhá Chan Sayab and Nahá.

Commercialization affected traditional Machiguenga agricultural practices and land-use patterns as they started to produce crops for sale rather than their own subsistence. The Machiguenga's usage of land was intensified through crop selection, increased garden sizes, time under cultivation, deforestation, and fertilizer usage (Henrich 1997:334). In seeking greater market integration, the Machiguenga's extended cropping periods exhausted their typically productive swidden system. To generate greater amounts of income, Machiguenga households allocated more labor to agricultural production (Henrich 1997:341). This is also true of the Lacandon who sold surplus crops

in addition to the government stipends or wages they received. Henrich claimed that the most commercialized Machiguenga farmers then cultivated over eight times the amount of land those did before them 20 years prior (1997:345). Henrich predicted that Machiguenga in the future would devise more productive farming in terms of profit, possibly investing in chain saws, tractors, and chemical fertilizers while further contributing to environmental degradation (1997:346). Similarly, the Lacandon are actively clearing forest with chain saws and using fertilizers and herbicides in their milpas.

Researchers claim that when faced with new circumstances such as access to global markets that indigenous people will switch from a sustainable mode of production to the new economy (Henrich 1997:347). It seems from the results of my research that many Lacandon have already taken advantage of such new economies. Henrich added that the Machiguenga are now also engaged in the sale of tourist crafts to maximize profit (1997:347). This was certainly true of the Lacandon in Nahá somewhat so of the Lacandon in Mensäbäk, as the bulk of their income comes from government wages and stipends. The economic transition for the Machiguenga has been the same for the Lacandon Maya.

5.4 Discussion

Recall in the first chapter that *hach winik* is how the Lacandon have referred to themselves, which translates to "real people." A tourist trying to identify a *hach winik* may have relied on several factors including wearing a white tunic and having long hair,

but to the Lacandon, their ethnic identity centered on being a member of a Lacandon patriline. Today, the Lacandon do not necessarily look like the forest dwellers from past photographs, nor do they even subsist or even treat one another as they did in a more reciprocal past that was characteristic of their culture. The Lacandon I experienced in Mensäbäk seemed different from those described in past ethnography.

In the year since my previous visit to Mensäbäk, it seemed that the community had changed incredibly. The President of Mexico visited the community of Mensäbäk early in 2011 filming an episode on Mexico for the series *The Royal Tour*. In the film, he claimed that the Lacandon had recently signed an agreement to protect the rainforest. Around this time, the President granted Lacandon requests for a local police force in all three Lacandon communities, equipped with a police truck, an ATV, assault rifles, uniforms, and batons. It has been discussed between researchers and various Lacandon community members that the reason for this request was a desire for protection against nearby Maya groups (non-Lacandon) who committed acts of violence on community members in spite for their privilege of residence within the reserve. As mentioned in the previous chapter, the men and one woman employed as police come from the already wealthy families of the community. The Lacandon of Mensäbäk also requested an ambulance for community health purposes, which they were granted, although no person possesses the training to operate the vehicle besides basic driving functions and the ambulance merely serves as an amusing taxi throughout the community's main road.

Interestingly enough, the government has its hand in a project to build an eco resort on the lake in Mensäbäk. In 2010, Mensäbäk and Nahá were added to the United Nations Educational, Science and Cultural Organization (UNESCO) natural protected

areas (http://www.unesco.org/new/en/media-services/single-

view/news/unesco_announces_selection_of_13_new_biosphere_reserves/). The Mexican Tourism Board and the Global Sustainable Tourism Council (GSTC), which is an international partnership that promotes sustainable tourism practices around the world, joined to promote tourism in Mexico, which offers 18 million acres of ecological preserves (http://www.travelvideo.tv/news/mexico/09-28-2010/the-mexico-tourism-board-joins-global-sustainable-tourism-council). The government believes that tourism in these areas will boost the economy and better the lives of the 6,500 Mayas living in them. Yet, is important to point that the GSTC consists of members of the tourism and travel industry, including UN agencies, tour operators, travel companies, individual hotels, and government tourism councils (http://www.travelvideo.tv/news/mexico/09-28-2010/the-mexico-tourism-board-joins-global-sustainable-tourism-council); one must wonder how this will affect the residents of Mensäbäk. The remnants of rainforest within the preserve are testimony to governments' efforts to finally preserve biodiversity only when it is near extinction; the survival of Lacandon past life ways seem to be fleeting as well.

With the presence of few Maya ruins, tourism in Chiapas is largely drawn towards indigenous cultures and their crafts. June Nash explains that the political scientists of the nineteenth century who studied the commodification and advance of "natural economies" like capitalism never could have imaged the extent of this phenomenon in the twentieth century (2000:129). Karl Marx saw that producers were alienated in an increasingly fetishized world where social relationships became exchange relationships measured in monetary value (Nash 2000:129). However, today, commodity fetishism can extend not only to the indigenous cultural products for sale, but also to the sale of the experience and

exoticism of indigenous life through tours (Nash 2000:129). The "Lacandon experience," complete with a guided tour by the most "traditional" looking members of the community around its surrounding lakes, rock art, archaeological sites, and forest, has become just one more commodity that can be pre-booked and sold in Palenque where pictures of "traditional"-looking Lacandon men are smiling and paddling through the lake's waters. Anticipation of this commodity can even be experienced in your home, as you lay curled on your couch with your latest edition of the *Chiapas* Moon Travel Guide detailing the curiosities of the "most isolated" indigenous community of Lacandon Maya in Mensäbäk.

Denise Fay Brown describes how five Latin American countries, including Mexico, joined with the WTO to standardize information on the *Mundo Maya* or "Maya World" and promote "the public and private sectors of the founding members countries, the development of tourism, culture and environment in the *Mundo Maya* region, and to facilitate suitable mechanisms that allow for the effective marketing of tourism products in international and national markets" (1999:295). These areas provide a certain landscape to the tourist and the promise of an appealing experience (Brown 1999:296).

Commercialized, cultural landscapes have become a commodity; their value determined by a global tourist market. Tourism in these regions is certainly advertised, promoted, packaged, and sold under specific conditions and made available to the consumer (Brown 1999:299). In 1977, Davydd Greenwood had the idea of cultural elements' commoditization and sale to tourists in a sort of "culture by the pound" where cultural brokers appropriated facets of a lifestyle into a tourism package (Brown 1999:300). This is certainly true of the Lacandon in Mensäbäk who offer guided tours of their heritage, or the Lacandon in Nahá who perform religious ceremonies commissioned

by tourists.

Ana M. Juarez conducted her own analysis of how a shift in subsistence economy to one that is commercial and tourism-based creates ecological degradation and a proletarianization of Maya groups in which they have little control (2002:113). She explains that the Maya region of central Quintana Roo were affected by political and economic processes in the 1970s that made it difficult for Maya groups to sustain subsistence-based economies. These groups subsequently entered commercial production that created inequality within local communities (Juarez 2002:115). Like Chiapas, Quintana Roo underwent environmental degradation in the 1930s and 1940s during programs that were intended to equalize opportunities for Mexico's peasant and indigenous populations by promoting modernization, economic development, and land reform (Juarez 2002:115). Juarez too began to encounter complaints for lack of material items with her informants as well as a change in consciousness in regards to reciprocity with the new commercial economy (Juarez 2002:118). Juarez argues that although globalization has been an increasing reality to Maya groups, it was not truly till the building of roads and the tourist era that globalization became a dominant part of their lives (Juarez 2002:119).

The consequences of globalization, tourism, and restructuring economy in highland Chiapas indigenous groups resulted in an increase of wealth discrepancies between rich and poor; the disappearance of the taboo against displaying wealth; and "the shift in the locus of political power and importance among community *indigenas* from religious hierarchy to legally constituted administrations (Whitmeyer and Hopcroft 1996:530). The same can be said of the Lacandon Maya today.

Commenting on globalization and indigenous citizenship, particularly, during the Vicente Fox administration, Neil Harvey claims:

It is significant that the final approval of the revised law by President Fox in effect retains the centralized and paternalistic role of the state in its relations with indigenous peoples, marking a clear continuity with the past and 'corporatist citizenship,' although now increasingly at the service of the private sector's efforts to gain greater access to resources located in areas of significant indigenous population. In this way, the future model of citizenship proposed by the Mexican government resembles a hybrid of corporatist and market citizenship, in which the state continues to secure political order (through the maintenance or expansion of military force if necessary), while the market seeks to incorporate those who are willing and able to work, produce and consume at globally competitive rates (2001:1058).

By integrating into the world economy and changing traditional modes of production, the Lacandon are a local example of the wider process described by Harvey. He points out that the conflicts in Chiapas "provide a window onto the complex interaction of global and local changes and the power relationships that are set in motion by development and biodiversity conservation" (2001:1057). The development and conservation projects in Chiapas have depended on "the acquiescence of local communities to participate in new relationships with government agencies and private corporations" (Harvey 2001:1057). The predominance of Coca Cola products in rural Mexico is one such example.

The globalization of food accounts for much of the dietary changes the Lacandon are experiencing. Commercial brands like Coca-Cola already play a large role, especially since its consumption is so heavily marketed by the Mexican government. Prior to his assuming office, President Vicente Fox was the CEO of Mexico's Coca-Cola Company, and he allowed the Coca-Cola bottlers to tap local groundwater unmetered and without reimbursement in the municipalities in which their plants were located (Nash 2007:10). During this process, not only did the Coca-Cola take local water for their products, it also bottled and sold people their own municipal tap water (Nash 2007). Second to the US,

Mexico is currently one of the largest consumers of Coke products in the world (Nash 2007). Coke marketing signs line the walls of homes in rural Mexican communities. The *tiendas* in Mensäbäk also brandished Coca-Cola coolers and marketing materials. I need not relay the nutritional information of one 16 oz bottle of Coke when Lacandon families were consuming the 3 L bottles, or *jumbos* as they refer to them.

5.5 Personal Reflection of my Research and Predictions for the Future of Mensäbäk
In earnest, this research could have better reflected the current Lacandon dietary reality. I could have been more persistent, more insistent, and more rigorous in my methods. In reality, this task would have been impossible at the time as I lacked training for such methods in medical anthropology. During my research, my focus shifted from the importance of cataloguing what was on families' plates to noticing the changing economics and relationships within the community. I began to struggle forcing conversations for dietary minutia during which the Lacandon women would become seemingly bored and uninterested. I myself found the dietary information less-attractive than observing the political arrangements within the community and individuals' opinions of them. Thus, my thesis topic shifted to Lacandon culture change from integration into the world economy with diet as an example of such change.

My personal opinion of the data I gathered during my research is simultaneously positive and negative. Reiterating, one positive change that the new mode of economy has brought for the Lacandon is their ability to purchase food when their *milpa* crops are out or fail. With money, one can obtain medicine, medical care, and many other

household necessities. In addition, with the new archaeology project, women were also able to enjoy employment and seek wages that became their own just like men, whether they saved it for personal means or it was used to help furnish the family with food or clothing. The government stipends for the elderly (70 *y mas*) and for women (*Opportunidades*) can also help in purchasing basic household necessities.

As stated in my introductory chapter, I was first drawn to research with the Lacandon because of their portrayal as a very community-oriented culture based on reciprocity. With the dawn of wage labor in Mensäbäk and a changing economy, I found that such relationships are no longer the case (not to say that they were ever perfect), and that members *within* families sometimes act selfishly with each other, let alone their behavior towards other members of the community. I do see an increasingly stratified future for the Lacandon Maya that will in time mirror our own independent mentalities here in the US.

I believe that consumption of commercialized food products is very detrimental to health. The Lacandon once participated in a subsistence that not only put them in intimate contact with their food sources that most Americans do not experience or understand, but they also participated in a subsistence that gave them access to many healthy foods and had the potential to produce up to thirteen tons of vegetables and fruits a year (Nations and Nigh 1980). Out of the four families I intensively studied, only one head of household actually tended to his own *milpa* without the aid of hired laborers. I am aware that this very household was forced to purchase food when their *milpa* produce had run out, but again, under the old communal system of reciprocity, a lineage mate in the same compound or in a neighboring village may have entered the situation and shared his

crops. That kind of reciprocity is no longer present due to this new economy centered around independently earned wages and profit.

Although tourism in Mensäbäk may grant some families more income and access to resources, I see tourism as a force that can also promote further cultural and ecological degradation. As I have tried to show in this thesis, the switch from subsistence agriculture to wage labor can have many cultural consequences, even extending to dietary health. The influx of tourists and cash into the Lacandon communities have not always been a positive experience for all members, and has replicated inequality that is present in our own wage-economy society.

The more the Lacandon come in contact with Westerners, they more they have desired (and have been granted) aspects of Western life. The Lacandon are becoming increasingly aware of consumerism and gradients of material wealth and like the rest of us, seek to furnish their lives with physical things. The desire to procure material items is not necessarily negative, this is sometimes done at the expense of others and can create feelings of animosity between the haves and the have-nots. I also see the archaeological project as contributing to the increasing inequalities within the community in time (with the exception of granting females agency and helping them seek education, as I mentioned earlier). Although the hiring seemed pretty non-discriminate, families started to influence the hiring process or voice frustration when the outside Tzeltal family members of a wealthy Lacandon's wife were allowed employment over local members. Since the project must have permission from the heads of the community in all its activities, granting them more privileges may increase over time. This becomes even more detrimental to community relations when the resources sought are employment and

money. Although it is not right to say that the Lacandon should be isolated in the jungle to continue what I naively felt was once a romantic and fulfilling way of life, I do not believe that all the changes brought by globalization are necessarily better for the Lacandon Maya.

Based on my research and observations in Mensäbäk, I have some predictions for the future of the community. I do not feel that the creation of a local police force in Mensäbäk was a positive addition. There is already a great deal of tension between people in Mensäbäk and neighboring Tzeltal Maya communities. In particular, the Lacandon fear people stealing from their *milpas* and hunting and logging within the boundaries of the biosphere. I fear that the new access to heavy military-style weapons increases the possibility for violence between communities. There was rumor that the Lacandon were allowed one assault rifle; yet, all of the members of the police possessed one. The new weaponry may not lead to violence, but there may be increased control by wealthy members over the rest of the community than the power they already exert through their higher employment statuses and material wealth since their sons constitute the local police force.

I have asked myself whether the newly wealthy leaders of Mensäbäk are truly members of the political-economic system in which they actively participate, or are they outside of it? Does the government see them as equals through their compliance, or will time unfold the true nature of their relationship? I have heard of the Lacandon referred to as the "pets" of the Mexican government, but I question for how long? Are the wealthy heads of Mensäbäk merely pawns in a larger game? There is a harsh reality of power inequalities in Mexico where the states enjoy far more power than groups of indigenous

people (Speed and Collier 2000). The Lacandon who have found themselves complacent government pets may join their other Maya cohort in protest and resistance if they find their lands and way of life taken away by the very government that they trusted.

I also fear that the consumption of junk foods can lead to serious health issues in the future for the Lacandon Maya. Not even considering dental health, research in the United States shows that such diets may lead to malnutrition or even chronic conditions like diabetes and obesity. Without health education and access to better health care, the Lacandon may be encountering some consequences of globalization for their health in the future.

5.6 Proposed Future Research

I see the community of Mensäbäk having huge potential for further qualitative cultural and medical research. I plan to return to Mensäbäk for PhD research to further investigate governmental involvement and tourism. I would like to more extensively investigate the Lacandon entrance into a wage economy, discover the full process of structural adjustment programs' involvement, and document household incomes to further examine the widening disparities in income and community inequality. Most importantly, with PhD training in both anthropology and public health, I would like to return and conduct actual health measurements, expand on my thesis material, and look for more concrete evidence of what I think is structural violence (Galtung 1969). Although this thesis was a materialist analysis of culture change, for my PhD research I would like to utilize the theory of medical anthropologists Merrill Singer and Nancy Scheper-Hughes to discuss

political economy and informants' experiences to determine their effects on health: a link I was not able to make with the short duration of my research and limited training.

Merrill Singer is a central advocate of "critical medical anthropology" (CMA), which is a theoretical and practical approach to understanding the interaction between health, illness, and healthcare in larger structural, political, and economic contexts and resultant disparities (Singer 1995; Joralemon 2010:41). To expand further, CMA is a theoretical approach that understands human health issues in the "light of the larger political and economic forces that pattern human relationships, shape social behavior, and condition collective experience, including forces of institutional, national, and global scale" (Singer 1986:128). CMA does not see ecological/evolutionary factors as the sole sources of health disparities, and acknowledges that many health issues are *social* and correlate with political economy and structural violence. CMA researchers openly attribute their perspectives to Marxist theory and the work of the Frankfurt school (Morsy 1996:27).

"Humanist Marxism" focuses on experience as mediating between social structure and the individual (Morsy 1996:27); elements of this have been integrated into medical anthropology as well. Although Singer pays *some* attention to illness experience, behavior, and meaning (Singer 1995:81), these are not major foci of his study as they would be for an interpretive medical anthropologist. Using the voices of informants, I want to incorporate the "critical-interpretive" approach that is used by Nancy Scheper-Hughes in my future research (Joralemon 2010:47; Scheper-Hughes and Lock 1986). While analyzing political, structural, and economic aspects of Lacandon reality can be useful in discussing health, I also appreciate the attempt of Scheper-Hughes and Margaret

Lock to give credence to the personal narratives and the "existential, the subjective content of illness, suffering, and healing as lived events and experiences" (1986:137). I personally align with the CMA approach in seeing that health can be greatly determined by the power structures in place, but I also believe that the individual experience of suffering can also affect health.

Illness is the human experience and perceptions of alterations in health informed by broader social and cultural dimensions. Scheper-Hughes and Lock view illness, suffering, and healing as "lived events and experiences" (1986:137). Scheper-Hughes and Lock argue that there are true links between illness and feelings of unhappiness, anger, anxiety, occupational stress, relationship/familial discord, and social isolation (1986:138). "Illness" and "disease" are not synonymous in meaning as the latter has a clinical basis, but I believe that future research in Mensäbäk may also illustrate that external social stressors can affect one's health. I argue that there can be a somatization of illness and research has already shown that inequality can create anxiety, depression, and even mental illnesses (Wilkinson and Pickett 2010). The stress presented by my informants while discussing financial struggles and material wealth may be an omen for some of the health tribulations that may accompany their changing economy and social relations.

Medical doctor Robert M. Sapolsky claims findings suggest that "being poor is associated with more stress-related disease" (2004:366). "Poverty is associated with increased risks of cardiovascular disease, respiratory disease, ulcers, rheumatoid disorders, psychiatric diseases, and a number of types of cancer" (Sapolsky 2004:366). Often, disease can result from malnutrition from dietary deficiency or harmful consumption patterns (Brown, Inhorn, and Smith 1996:200). He also suggests a "five-to-

ten-year difference in life expectancy in some countries when comparing the poorest and wealthiest, and decades' worth of differences when comparing subgroups of the poorest and wealthiest" (Sapolsky 2004:366). I personally lacked training and the qualifications for assessing and obtaining health measurements during my fieldwork in Mensäbäk. This fact, coupled with a lack of Lacandon health records, makes it difficult for me to connect certain diseases or illnesses to Lacandon realities. However, with Lacandon integration into the global economy and resultant wealth disparities brought by a new local economy, it may be possible to link these clinical facts with their poverty in general, as they too are susceptible to these clinical realities. I would like to explore in the future whether this is a Lacandon reality or not.

Aside from economy, diet was largely discussed in this thesis. Human nourishment is a biological necessity for all individuals (Bruegel 2011:40). The Lacandon in Mensäbäk all nourished themselves through the consumption of foods and much was determined by personal choice, but I also argue that the material wealth of families played a large role in the foods that were eaten by these families.

Malnutrition is not only an individual problem, but also a political one, as it does not concern societal surplus, but how that surplus is located (Escudero 1991:16). James et al. claim that the diet of lower socioeconomic groups globally provides cheap energy from foods with fats, sugars, preserves, potatoes, and cereals, and possess little vegetables, fruits, and whole wheat components (1997:1545). Such diets tend to lack the level of essential nutrients like calcium, iron, magnesium folate, and vitamin C that may be present in wealthier diets (James et al. 1997:1545). Yet, I acknowledge the consensus among nutritionists that the most usual forms of malnutrition is caused by a lack of

overall energy in the diet rather than the lack of any specific component, such as protein, vitamins, and minerals (Escudero 1991:16).

Although traditional Lacandon diets of *milpa* foods and game meat when available was subject to environmental conditions in flux, I feel that with specialized training I may be able to measure that the increased consumption of junk foods. No matter one's material wealth, such diets can cause malnutrition and hamper one's health.

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