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INDIGENOUS LANDS IN A DEVELOPING REGION:
A HISTORICAL ETHNOGEOGRAPHY OF THE PECH INDIANS OF EASTERN HONDURAS, WITH EMPHASIS ON RECENT SETTLEMENT AND LAND USE CHANGES

VOLUME I

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Geography and Anthropology

by

James Richard Samson
B.S., Louisiana State University, 1984
August 1997
To Clay M. Samson, Sr.
(December 2, 1933 - June 26, 1993)

and

To Laurie Kay Samson
(July 20, 1962 - October 9, 1986)
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ABSTRACT

Since before Spanish Contact, the Pech Indians have occupied a large portion of northeastern Honduras. Like other native American populations, they have suffered significant territorial reductions and cultural alterations at the hands of European colonists and modern ladino immigrants.

Utilizing the methodologies of cultural geography, ethnohistory, and ethnogeography, the Pech, formerly known as the Paya, are scrutinized to illustrate the process by which indigenous peoples are reduced and incorporated into a developing national setting. Part One examines the scholarly record on the ethnohistory of the Pech and their neighbors to delimit their habitats and to document Pech incorporation into the Spanish colonial realm. Part Two describes their post-Independence settlement and land use patterns, and explains the most recent changes. The pivotal role of Padre Manuel Subirana in establishing the original Pech land grants is highlighted, and early Honduran censuses and travelers’ accounts by Karl Sapper and Eduard Conzemius are employed to reconstruct settlement locations. From fieldwork in 1991-2, the author identified the Pech’ current three-fold use and characterization of the local habitat: montaña, serranía, and vega.

The eastward expansion of Honduran (ladino) population and the accompanying economic activities that forged into the Pech lands of eastern Olancho during the last three decades is proposed as the mechanism that recently altered the settlement and land tenure of the Pech. National and local migration studies, mapped intensively, indicate clearly the movement of the ladino frontier eastward to overwhelm the lands of the
Pech. Road improvements triggered alterations of Pech lands and their attempts to reconstruct their land tenure system.

Today, of the approximately 1,900 Pech, about 90 percent occupy a much-reduced bi-nodal core region in two upland valleys in the municipios of Dulce Nombre de Culmi and San Esteban, eastern Olancho. A few Pech also live in outlier lowland areas at Silin (near Trujillo) and at Las Marias on the Rio Plátano.
CHAPTER 1

Introduction

Introduction to the Study

Since the arrival of the Europeans in the New World, Native American culture groups have experienced a range of impacts to their societies, cultures, and geographies. Such impacts have affected all of the indigenous groups of the Americas and researchers have examined these changes among many different groups from the perspectives of many different disciplines and at a variety of scales of inquiry.

Most groups have faced similar hardships such as land loss and relocation, disruption of traditional cultural ecology, loss of traditional culture, and impoverishment within European societies. To say that all native American groups have been impacted by the spreading influence of European societies and that most faced similar problems is not, however, to suggest that all groups share exactly the same contact and conquest history. Some groups were impacted most heavily very soon after Contact while others remained relatively isolated from the Europeans for a longer time. Some groups experienced greater changes in status than others. The Aztec were removed as rulers while their subjects remained subjects but under Spanish rulers. Some groups were exterminated while others managed to survive and even prosper under the new conditions. The chronologies differed among native groups. Some lost territories early
on while others maintained independent territories for a longer time. After 500 years of European presence in the New World, some native groups are only now beginning to see significant improvements in their situation. Particularly groups in Canada and the U.S. are realizing political and economic advances greater than any since Columbus. The Canadian Inuit are preparing to take title and political control to Nunavut in the eastern Arctic regions while "Indian Casinos" spring up on Indian lands around the U.S. Conversely, other groups continue to struggle for their survival and are only now facing forces that threaten their continued existence as a distinctive group.

It is probably fair to say that, at the scale of the culture group, the bulk of attention has been given to native American groups that either were more highly advanced at the time of Contact, or that occupied areas that are historically, economically, or ecologically of greater interest to modern society. Thus, groups that once inhabited areas that are now firmly integrated into modern state territories or that inhabit areas of current environmental concern, such as Amazonia, have received the lion's share of research attention. Less advanced cultures and groups peripheral to modern society have been less studied.

The Indian groups of eastern Honduras and Nicaragua were among those that were able to maintain some degree of isolation from Spanish society until relatively late. They have lived on the periphery of those states' national territories and are only recently experiencing more intense interaction with the national societies. They are also among those groups that have received relatively little scholarly attention. Few efforts have been made to understand the recent sequence of events and magnitude of changes
occurring among the inland indigenous groups of this area. By conducting studies of these groups, among others, we contribute to a more complete understanding of both the post-Columbian history of native Americans and their current status and prospects. Such understanding illuminates not only the history and conditions of native American culture groups but that of the larger societies of which they are now a part as well.

The Pech Indians are one of the native American culture groups of interior eastern Honduras and the identification and explanation of recent changes in their geographical patterns is the goal of this study. During this century, the Pech Indians of interior eastern Honduras have experienced territorial reduction and fragmentation, loss of access to the most desirable hunting, fishing, and farming lands, and changes in their socio-cultural standing, settlement patterns, and cultural ecological and subsistence activities. These, and no doubt other, changes are occurring because the Pech have become increasingly integrated politically and economically into Honduran national society as the eastern frontier of settlement and economic activity has advanced into the Pech region.

The aims of this study are twofold. The first is to examine the evidence for proof that the Pech have indeed experienced such transformations in their cultural and geographical patterns. This aim, then, is simply to document the variety and magnitude of changes undergone by the Pech as a culture group since Contact, in some cases, but particularly over the last century or so. It attempts to tell the story of the Pech. The second aim is to illuminate some of the, certainly not unique, processes by which these transformations have proceeded to increase our understanding of the phenomenon of
indigenous territorial reduction and cultural change in this part of the world. Aspects of the frontier phenomenon, culture contact and change, and the overall indigenous experience after Columbus are all touched upon. The central focus, however, remains the experience of the Pech themselves rather than the explication of any particular theory of geographical or cultural change.

A study of the recent history of a group such as the Pech necessarily encompasses aspects of many of the traditional concerns of geographers who study Latin America. These concerns may be subsumed under two broad and related areas of interest that were identified in the first major review of geographical research on Latin America produced by the Conference of Latin Americanist Geographers in 1970 (Lentnek, Carmin, and Martinson 1971). These areas of interest were presented in that volume under the headings of “Aboriginal and Peasant Cultures” and “Population and Settlement” (1971: vi).

In his review of research conducted on “Indian Societies and Communities in Latin America,” Aschmann (1971) highlighted the importance of this topic and posed several questions that not only framed his review but also represented a research agenda for the future. Of the “Indian societies in post-Columbian and modern times” Aschmann asked:

Where and why did they survive both racially and culturally? Where did they survive physically but have their cultures altered or replaced? What sorts of relationships with their environments, physical and social, do communities that are identifiable Indian exhibit today, and how are their members reacting to the assimilative and acculturative pressures of the national states in which they are located? In addition to providing intrinsically [sic] interesting information and descriptive insights into the character of a considerable number of the Latin
American states and regions, studies directed to answering the above questions may afford primary contributions to answers to more general and theoretical questions. A few examples are: What social and other attributes do those societies have that successfully maintain their integrity although surrounded by other more numerous and economically more powerful groups? When two distinct societies live in fairly close contact over a long period of time what sorts of culture elements and complexes are likely to flow from one to the other, especially which elements are capable of passing from the richer to the poorer group? What are the effects on individuals and small communities of slow or rapid assimilation into at least the economic system of a more complex society? Can distinctive patterns of land use and exploitation exist side by side in the same sort of terrain or will that system which is in the short run economically more productive or profitable inevitably take over? (Aschmann 1971:124)

Aschmann's comments highlight two important aspects of the study of indigenous groups. He is first concerned to identify and describe the groups' basic cultural geography, their regions, activities, and landscapes. Secondly, he is interested in the connections and relationships of these groups with neighboring and national societies. This consideration of the regional context of, and its implications for cultural change among, indigenous groups necessitates the consideration of many other regional or national scale forces and processes which may vary in importance depending upon the particular group and time period under study. For the Pech and similarly situated groups that have only relatively recently begun to experience constant and intense contact with national societies, consideration of the larger context is of fundamental importance and leads us to consider the second major topic mentioned above—population and settlement—as a basic or dominant process bringing change to the local region.

Also writing in the 1970 CLAG benchmark publication, Dozier (1971) discussed the importance of such rapidly changing "emergent areas" at the frontiers of settlement as a topic for study in its own right to further our understanding of Latin America. He
characterized some of the processes of change in these emergent areas and their importance to geographers:

Some of the most rapid and drastic changes in Latin America are occurring in areas that formerly were thinly populated but now have scores of in-migrants, in areas that formerly were isolated but now have all-weather road links with the outside, in areas that were formerly tropical forest but now have cleared agricultural land, in areas that had once a deficiency of water but now have new and ample irrigation facilities. The face of the land is being altered by man, and man himself is being altered by the new relationships with the land which are opening up, not everywhere but in some places. We fail in our responsibility if we do not investigate these areas of rapid transition and thus add to the geographical knowledge of Latin America. (Dozier 1971:86)

In his article, Dozier emphasized the importance of emergent-area studies to the continued health of Latin American geography as a field of investigation and he highlighted the fundamental contribution of basic research, of compiling new geographic information, in these regions of rapid change. Such studies “portray and explain the area in transition” (1971: 88) to further our knowledge of the current status of geographical patterns. They therefore provide the basic information necessary for accurate and up-to-date geographical teaching and research—“the raw material for presenting the geography of Latin America as it really is today” (1971: 86).

In spite of the case Dozier (1971: 86) makes for the importance of studies of emergent areas, he found that they accounted for a “very small” proportion of the published research on Latin America during the 1960s. The only Central American locales among the emergent areas which Dozier identified as potential research sites in need of study were “the long-planned, finally completed road connecting for the first time the Nicaraguan Pacific coreland with the Caribbean coast” and “Coastal El
Salvador" (1971:90). As he was writing, the Honduran frontier was only beginning to enter the Pech core region, but as of today that area can certainly be considered as emergent area of Honduras, an area that has been incorporated into the national economic system, and is continuing to develop as population and economic activity in the area increase. This study, then, seeks to contribute to the still-pertinent geographical endeavors recommended by these two authors at the beginning of the 1970s—the expansion of our knowledge of the native peoples and emergent areas of Latin America.

**On Geography, Ethnohistory, and Ethnogeography**

**A Geographical Approach**

The very broad and diverse academic discipline of Geography is united primarily through the adherence to a spatial perspective and a focus on place. Although geographers can and do study topics ranging across the entire surface of the earth, their studies are concerned with describing and explaining events or conditions at a place, or the relationships between places. Geography's fundamental and unique contribution to the work of the academic disciplines is its focus on place and spatial relations. The goal of science has been succinctly stated as the 'pursuit of a broader understanding of natural and human processes' (McCain & Segal 1988). That the humanities share a similar goal is indicated in Barzun and Graff's view that narrative history best serves to "broaden [our] imagination and sharpen [our] judgement" (1985: 267) as well as in humanist geographer Yi-Fu Tuan's assertion that the goal "of humanistic enterprise [is] to increase the burden of awareness" (1977: 203); a greater burden that nevertheless benefits us by enabling us to "grow somewhat wiser" (1984: 9). Geography's goal, then
can be assumed to be a broader understanding of humans and their world through the study of places and the interconnections or relationships between them.

Geography's spatial orientation is highlighted by the types of questions which are often presented by authors of introductory level texts and articles as basic and representing the fundamental aims of the discipline. Holt-Jensen suggested that the geographic endeavor boils down to answering one question that is central to the entire discipline, "Why is it like this here?" (1988: 6). Blouet fleshes this out a bit by presenting four questions that related to what Blouet suggested as the two most fundamental of the five themes of geography, the themes of Location and Place. Blouet posed the questions, "Where is it?" "What is it like?" "Why is it where it is?" and "How did it develop as it has?" as foundational for studying a place (1990: 227).

The fundamental role of geography as a discipline and the types of basic questions geographers ask to fulfill that role highlight the breadth of the field and hint at the difficulty of conceiving of it as a unified field. Two dualities or divisions that have often been recognized within the field further illustrate its breadth and disciplinary complexity. Each of these dichotomies is better thought of as a continuum rather than an either-or divide, however. In terms of content or topic, geography is commonly dichotomized into physical and human geography. Hettner (1927) recognized physical and human geofactors of the landscape. Geography courses are often located within physical or social science departments in universities. Most geography, however, emphasizes either human or physical aspects but contains some consideration of the other. That is, a particular study is located somewhere on the continuum between being
entirely human and entirely physical in topical focus. Regional geography typically tries to give significant weight to both aspects and, in this scheme, would be located near the middle of the spectrum.

In terms of approaches, methods, or philosophies, geography is commonly dichotomized into an idiographic or nomothetic enterprise. The proper emphasis of the discipline in this regard has been much debated, often to the point of obscuring the fact that much of geographic research, individually and as a discipline, has rarely been entirely one or the other. Cloke, Philo, and Sadler parenthetically noted their rejection of a hard and fast categorization based upon these extremes as they related the history of geographical research stating that “much of the debate over the application of quantitative methods in geography after 1945 is contained in this (ultimately false) analytical separation” between “generalising or nomothetic systematic approaches” and “essentially descriptive or idiographic regional approaches” (1991: 10). They also quote Hartshorne’s recognition that geography is necessarily composed of both types of research emphasis:

Since geography requires both generic studies and studies of individual cases — it is in part nomothetic, in part idiographic — there seems little point in attempting to measure the relative amount of the two types of studies. . . . Each student may place his own emphasis on that type of study which he himself is most interested to pursue. (Hartshorne 1959: 164; in Cloke, Philo, and Sadler 1991: 27)

Just as individual studies can be located on the continuum between these extremes, the discipline as a whole has moved back and forth along the continuum during its history.

Geography, then, seeks to understand the world by answering these or similar basic questions posed concerning places or topics of interest to geographical researchers.
Researchers in other scientific and humanistic disciplines can and do study the same places and topics as geographers but typically their basic questions are asked from a different organizing perspective determined by their disciplines' own role in the division of labor among the academic disciplines. These other basic questions are equally as valid as the geographic questions but are intended to illuminate different aspects of the world or the same aspects from a different fundamental perspective.

It would be assumed, therefore, that a geographical study should possess certain characteristics that distinguish it from studies of similar places and topics conducted in other disciplines. In reality, however, there seems to be less agreement on what such characteristics might be than would be supposed because of both the breadth of geography itself and its overlap, and recent convergence, with other disciplines.

Identifying characteristics which are common to all geographical studies is difficult first because of the breadth of the discipline. Unlike many other disciplines, geography straddles or spans across the categorizations of the academy which are commonly recognized even to the point of often being reflected in the university organization. Geography straddles the physical sciences, social sciences, and, especially recently, even the humanities. Aspects of each of these broad academic divisions are studied by geographers. Therefore, geographic studies cannot all be characterized by a common focus on a particular topic which might unify other disciplines such as plants, animals, ecosystems, human groups, or human political, economic, or cultural activities.

Distinguishing geographical studies from studies in other disciplines is also difficult because of the similarities in topic and method that individual studies and entire
subdisciplines often share with the other disciplines. Geographers with close ties to other disciplines use methods and techniques adopted from the discipline of their subspecialty to add explanatory power to their documentation or description. Szymanski and Agnew (1981: 31) noted that "It is a commonplace observation within and outside the discipline that geography is relatively impoverished theoretically and substantively as compared to, say, economics." But geography has also contributed its strengths to concerned researchers in allied fields. Increased awareness of the importance of the physical environment to human existence and activities has prompted researchers in other disciplines to take physical factors and the interconnectedness of a variety of factors and places into account in their own studies. In this sense, perhaps somewhat of a convergence in the scale of inquiry among disciplines has taken place. Other disciplines now seek to broaden themselves while geographical studies have sought to specialize or narrow their focus.

Efforts over the last half of this century by geographers to achieve more accurate description and explanation of our world have led to the adoption of a variety of perspectives, paradigms, theories, and methods on the part of different practitioners of the discipline. Most of these perspectives have been adopted after their development in other disciplines in an attempt to apply new ways of viewing reality to the geographic endeavor. Currently, geographers conduct research from a variety of perspectives and no single research paradigm can accurately be said to dominate or unify the discipline. We find ourselves in a truly postmodern condition as geographic research is conducted from a great variety of perspectives based upon a variety of basic assumptions about the
nature of reality and utilizing a great variety of research theories, methods and
techniques. Each has something to offer and each contributes to a more complete
understanding of our world. Pickles and Watts described the current situation in
geography thusly:

contemporary human geography reflects what we might call a postparadigm
condition in which disciplinary practice and concepts appear, for good and bad. to
have broken loose from any notion of disciplinary closure and unitary coherence.
More than at any time in the past, geography is comprised of competing, cross-cutting, flexible forms of knowledge production and assessment. (Pickles and
Watts 1992:301)

Cloke, Philo, and Sadler recognized that the diverse state of the discipline can have a
positive impact if geographers do not view the diversity of approaches as a competition
between the adherents to each paradigm but rather acknowledge the limited contribution
of each approach to the whole. Such an acknowledgment “can become a forward step
away from the naivety of totalising theories that obscure more than they reveal, towards
a recognition of the possibilities for creative and fruitful dialogue between different
approaches, each capable of opening a distinctive ‘window’ on the human-geographical
reality beyond” (1991:202-203). Chappell likewise recognized the potential benefits of
bringing a variety of perspectives and techniques to bear on a problem. He suggested
that

Competing philosophical views may both have some validity in the same area. For
example, a positivistic approach may yield useful statistical findings about human
problems, while at the same time, as phenomenology suggests, the same data may
reveal other layers that are not susceptible to precise measurement or reducible to
simpler elements. In the case of polarized viewpoints, it is often wise to take
Aristotle’s advice to seek the mean between two unsound extremes. (Chappell
1989: 29)
These viewpoints speak to the concerns expressed in 1924 by a major figure in the history of U.S. geography. Carl O. Sauer expressed concern over the lack of a unified, scientific approach to geographic studies of a region. He believed that the results of several studies of the same area would show “serious discrepancies because of lack of agreement as to the things chosen for observation, because of divergence of manner of observation, and finally because of differences of interpretation” (Sauer 1924: 26, quoted in Cloke, Philo, and Sadler 1991: 26). Perhaps Sauer’s concerns reflect evidence of the existence of several paradigms within the regional geography even of his day. Certainly they reflect a belief that was a product of the times; that there is but one ultimate truth or reality to be discovered. We can assume that Mr. Sauer would be even less comfortable with the state of affairs in geography today. Our postmodern condition, however, reflects our own increased uncertainty of the existence of one truth or one reality.

In this sense, however, geography as a discipline maintains its traditional interest in, and a concern for, the whole picture even as individual researchers or schools of research branch out to specialize in specific approaches. As Cloke, Philo, and Sadler (1991: 190) note, “It might be added . . . that earlier approaches adopted in human geography — and most notably the various versions of regional geography . . . , may not be so disabled by the postmodern attitude, and it is arguably the case that a form of postmodern ‘sensibility’ has long been present in the care geographers have customarily shown for the specific lands and peoples of specific places.”
Obviously, then, no single question or list of characteristics is likely to represent every single work presented by geographers or as geography but some authors have attempted to suggest elements characteristic of much, especially traditional, geographical study. Chappell highlighted three traditional components of geographical study when he suggested that

One would rarely go wrong in categorizing a study as truly geographical when it involves attention to both spatial and ecological relationships—i.e., to both situation and site. The same study would assume much more significance, if it also paid attention to how those relationships developed over time. (Chappell 1989: 19)

The approach of this study utilizes perspectives of cultural geography and particularly of its constituent elements of cultural region, cultural ecology, cultural landscape, and ethnogeography. Cultural geography is a major subdivision of the discipline that focuses on the geographic patterns related to various groupings of the culture-bearing animal, human beings. The culture groups considered can range from small, isolated bands practicing their traditional folk culture to global-scale groups united by elements of modern popular culture. The term “cultural geography” is sometimes used synonymously with “human geography” to indicate research that emphasizes human activity more than physical processes because elements of the various topical subspecialties of human geography, such as economic or political geography, make up the content of cultural geography. Jordan and Rowntree define cultural geography as the study of spatial variations among cultural groups and the spatial functioning of society. It focuses on describing and analyzing the ways language, religion, economy, government, and other cultural phenomena vary or remain constant from one place to another. (Jordan and Rowntree 1986: 4)
Studies in cultural geography range in focus from the various subspecialty focuses on a specific aspect of a group to a broader consideration of several topical aspects related to a certain group.

Various authors have tried to categorize the main subtopics of cultural geography. A consideration of a few of these categorizations serves to delineate the field. Wagner & Miksell identified “five implicit themes” of cultural geography: culture, culture area, cultural landscape, culture history, and cultural ecology (1962: 1). De Blij and Mueller present their own five components of the field: cultural landscape, culture hearths, cultural diffusion, cultural ecology, and culture regions (1994:354). Jordan and Rowntree also present five themes in cultural geography: culture region, cultural diffusion, cultural ecology, cultural integration, and cultural landscape (1986: 6). Of course, within each scheme the interconnectedness of the various elements of human geography makes for considerable overlap of each of the categories. Likewise, comparisons between these three schemes shows considerable similarities of categories with the differences representing merely slightly different perspectives on the organization of the field.

Three components are common to all three organizational schemes; cultural region or area, cultural landscape, and cultural ecology. The remaining five components perhaps reflect different orientations of the various authors but can be condensed to two dimensions or perspectives from which to view the three common components, the cultural and historical dimensions. Each of the variable components, but especially those of culture and cultural integration, highlight the role of culture in defining the
geographical region under consideration and of culture-related processes in maintaining or changing the characteristics of the region. The three variable components of culture history, culture hearth, and cultural diffusion highlight the temporal dimension of the culture group and its region, often with a focus on origins and change. These topics are not, of course, limited to study only by geographers. Studies of the culture history, and related themes of hearth and diffusion, of a group, particularly a traditional minority group, by anthropologists, historians and geographers have come to be classified as a subspecialty known as ethnohistory and, when conducted from an explicitly geographical perspective, as ethnogeography.

Ethnohistory

The approach and methodology which probably best characterize this study would be those of ethnogeography. Ethnogeography is a term sometimes used to describe geographic studies of traditional societies. It is conceived of as similar to the more widespread field of ethnohistory but is conducted primarily from the geographic point of view rather than the historical or anthropological. There is overlap between ethnogeography and ethnohistory, as some research might be properly classified as belonging to either field. Further, ethnogeography shares some of the ambiguous qualities of ethnohistory. Since it is more widely known, and has been more widely debated, an introduction to ethnohistory will provide background and comparative material for a consideration of ethnogeography.

Like geography, ethnohistory is a field of study with a fluid and vague definition. Krech (1991: 347) believed that Clark Wissler may have coined the term 'ethnohistory'.
in 1909 when he “spoke . . . of reconstructing prehistoric culture by combining ‘available ethno historical and archaeological data.’” Krech also interpreted a definition of ethnohistory given in 1966, after the field had time to take on discernable outlines:

In what may have been the most influential and lasting of statements on ethnohistory in the 1960s, W. C. Sturtevant (292:6-7) defined ethnohistory as “(the study of) the history of the peoples normally studied by anthropologists.” For Sturtevant and many others, conventional anthropology focused on exotic people and presumed that explanation required theory, typology, and generalization; conventional history on the other hand dealt primarily with non-exotic Western people and with unique or particular events, and favored narrative over explicit generalization—matters I take up below. (Krech 1991:348)

Sturtevant’s very general definition apparently did not prove to be sufficient, however, as practitioners continued to struggle with formulating more precise descriptions of ethnohistory and its articulations with ethnology and history. In 1972, Carmack (1972: 230) wrote that, “A field of study which might be termed “ethnohistory” has yet to be defined. In fact, the derivation of the term itself is not known for certain, and its meaning varies widely from one context to another.” He further noted that many authors in a 1961-62 series of articles “emphasized that ethnohistory is a method or technique, not a discipline . . . that . . . might serve as a means for combining the generalizing aspects of ethnology with the careful evaluation of sources and interest in time sequence of history” (1972: 230). Ethnohistory, then, was seen to exist at the intersection of, and to utilize the approaches of, ethnography and history. Its practitioners viewed it as a subfield or subspecialization of their respective primary disciplines of anthropology and history (Carmack 1972: 235; Cline 1972a: 9).

Carmack (1972: 232) concluded that, “like archaeology, any exclusive definition of
ethnohistory depends primarily on methodological considerations. Ethnohistory is a special set of techniques and methods for studying culture through the use of written and oral traditions.” From the anthropological perspective, it seems as though the major concern is to add a temporal dimension to ethnological studies—to move from synchronic to diachronic studies of culture. From the perspective of an anthropologist, ethnohistory seeks to add the techniques of history to those of cultural anthropology.

In his 1972 introduction to the Guide to Ethnohistorical Sources volumes of the Handbook of Middle American Indians the volume editor and historian Cline also considered the definition, aims, and varieties of ethnohistory. He highlighted the fundamental role of ethnohistorical investigations in illuminating the colonial and post-colonial periods of Middle American history, noting that, although ethnohistorical techniques are often employed to improve archaeological studies of pre-Hispanic cultures and ethnological studies of present cultures, “ideally conceived and thoughtfully written ethnohistory has an independent mission, quite as valid as that of archaeology or ethnology, in laying bare social dynamics, processes, adaptations, rejections, syncretisms, and other topics in the 400-year colonial and national periods that have been of professional concern to both anthropologists and historians ever since their respective scholarly disciplines developed their unique academic doctrines, value systems, and approved practices for study of man in society” (Cline 1972a: 5-6).

In distinguishing ethnohistory from other subfields of the parent disciplines, Carmack (1972: 230) summarized Sturtevant’s suggestion “that there are three basic ‘dimensions’ which probably would be widely accepted as generally characterizing
ethnohistory: its focus on the past condition of cultures; its use of traditions, either oral or written, as the primary data source; and its emphasis on change over time in the cultures studied (diachronic dimension).” Cline (1972a: 6) likewise indicated that “the use of documentary evidence for studies of native culture growth and change, [is] a chief characteristic of what is now called ethnohistory.”

Carmack presented three subjects that “are the ones most often studied by ethnohistorians: specific history, historical ethnography, and folk history” (1972: 235). He briefly described each type of ethnohistorical study, respectively, as “the writing of histories of specific societies in terms of their past events or culture traits as manifested in time, space, and concrete act” (1972: 236), “the process of reconstructing past societies and cultures, whether as institutional parts or cultural wholes” (1972: 238), and the examination of “the view a society has of its past” (1972: 239).

Cline also considered the varieties of ethnohistory, but with particular interest in the somewhat divergent approaches usually taken by ethnohistorians on the basis of their primary disciplinary training. Following Sturtevant, he described the “classes of writings” (1972a: 9) as derived from the ethnohistorical approach then taken by historians and anthropologists:

Anthropologists, in [Sturtevant’s] view, consider ethnohistory as a field using nonanthropological evidence (historical documents) for anthropologists’ purposes, where historians see it as using nonhistorical (i.e. anthropological findings) for historiographical purposes. Thus there are at least two principal interests covered by anthropological ethnohistory: historical ethnography and historiography of essentially nonliterate cultures. The former is the reconstruction of a synchronic ethnographic description of a past stage of culture, usually based on written records contemporary with that stage. The latter tends to be an attempt to reconstruct a diachronic account of a past society or culture (even a presently
functioning one) from documents not necessarily from that society or culture, which may have produced few such written records. (Cline 1972a: 11)

Cline noted that “Historians, like anthropologists, have written ethnohistory of both sorts before that label became common” (1972a: 11) but he nevertheless distinguished along general lines the works coming out each discipline. He stated that, “at the risk of distortion through simplification, it can be said that usually ethnohistory for anthropologists is essentially historical ethnography created from documents rather than from direct informants” (1972a: 11) and he presented Phelan’s view that ethnohistory was an “effort to combine sound historical practices with some anthropological techniques” (Phelan, 1959, pp. xiii-ix quoted in Cline 1972a: 12) as characteristic of the historians’ approach.

In addition to the “two principal interests covered by anthropological ethnohistory” (1972a: 11) presented above, each of which were stated to have been written on by anthropologists and historians, Cline identified other discernable varieties of ethnohistory including ethnogeography, written by geographers and concerned with “sequent occupance” and the reconstruction of “earlier phases of the human geography of parts of Middle America” (1972a: 12); “investigations of matters directly related to colonial Indians, but nearly always primarily from European tradition sources” written “primarily by historians” and whose “techniques of reconstruction owe little or nothing to anthropological viewpoints or practices” (1972a: 13); and “the large body of writings on Conquest and its implications for previously wholly aboriginal societies and cultures” (1972a: 13).
Also in addition to the two primary types of ethnohistory as “historical ethnography and historiography of essentially nonliterate cultures” (1972a: 11), in a footnote Cline recognized Carmack’s third type, that of ethnohistory as ethnoscience or folk history. Curiously, he first mentioned folk-oriented research in his identification of “folk geography” as an ethnoscience-related subtype of ethnogeography that studies “how native peoples organize geographical knowledge” (1972a: 12) but then continued in apparent analogy: “Thus one anthropological usage of ‘ethnohistory,’ rather than denoting ‘history of natives and their culture’ (historian’s approach), covers study of how natives organize and transmit their knowledge of their own past” (1972a: 12). In relegating this aspect of ethnohistorical research to a footnote, perhaps Cline is implicitly agreeing with Carmack’s (1972: 239) statement that the study of folk history “is actually a special aspect of ethnographic reconstruction.”

By the 1990s Carmack’s descriptions of the content of ethnohistorical research remained valid but movements to redefine, or at least expand the definition of, ethnohistory led Krech to write that “a crisis exists over what ethnohistory comprises” (1991: 349). In agreement with Carmack’s classifications of ethnohistoric research he noted that in the past

There has been little disagreement over identification of the principal products or types of ethnohistory, even though different labels have been used: historical ethnography, or synchronic reconstruction of a culture or society at some past moment; folk history, or historiography in non-literate societies; specific history, or diachronic ethnohistorical study (including the archaeologist’s direct historical approach) explicated by working (and projecting) “upstream from the present to the past or “downstream” from the earliest to the most recent period (42, 142, 292). (Krech 1991: 348)
Krech also reported that into the 1980s there was substantial agreement as to the origins and aim of, or approach to, ethnohistory.

From 1960 through the early 1980s, the stream of ethnohistorical stocktaking was in spate. Most definitions stressed the catholic use of data obtained in the field, archive, and museum in order to write "a thorough, delicately balanced tribal history" (89:268) or "history in the round" (325:45); or to detail a group's acculturational experiences; or to "gain knowledge of the nature and causes of change in a culture" (5:2). From history came "cautious accuracy," from anthropology "imaginative theorization" (325:45) as well as culture "defined by ethnological concepts and categories" (5:2), ideally to fuse in the ethnohistorian. (Krech 1991: 347-348)

Especially after 1950, however, the convergence of the disciplines of history and anthropology in matters of subject matter and theoretical perspective along with questions about the value of traditional ethnohistoric research and writing led Krech to state that "in order to discuss the nature of interdisciplinary influence it makes sense to concentrate not on categories of historical or anthropological production like folk history, specific history, or ethnographic reconstruction... but instead on the ways anthropologists and historians explain cultural and social realities" (1991: 350). Krech then differentiated two genres of theoretical perspectives found within history, anthropology, and ethnohistory. The genres were presented in terms of a dichotomy between positivism and relativism or positivism and idealism.

His survey of current ethnohistorical research then categorized studies based upon their approach to their topic into four groups which range from a focus on "the fields of force linking societies to one another in an interconnected political economy" to "the investigation of the different cultural or structural interiors of bounded, autonomous, systemic sociocultural units" (Krech 1991: 355). Studies of these types
were categorized under the headings of “political economy” and “culture,” respectively.

Krech continued:

In the middle ground are diverse, overlapping perspectives. Some of these present, in a straight-forward chronological narrative uncomplicated by theoretical musings (but underlain by theoretical assumptions) the historical “facts”; others attempt, sometimes usefully, to inject into one of the more extreme polar positions a theoretical insight that may be lacking. (Krech 1991: 355)

These classes of studies falling along the middle of the continuum were categorized under the headings of “society and ecology” and “practice,” respectively. Krech further specified that “each arena is characterized by a specific range of positivist or idealist approaches” (1991: 355). The political economy category contains studies “that emphasize economy, politics, demography and ecology; that are materialist, positivist, and implicitly or explicitly comparative; whose ultimate intellectual heritage is Marx; and that owe much to critical theoretical engagement with . . . a variety of schools, strands, and strains of Marxian analysis” (1991: 356). The society and ecology category “is heterogenous, embracing mainly positivist analyses of society, demography, and ecology” (1991: 357). The practice category contains studies which, as mentioned above, are intermediate between studies of a dominantly positivist-political economy focus and those with a primarily relativist-culture focus. Practice studies approach ethnohistory with the recognition that “the expansion of a capitalist market’s determinative influences are mediated and affected by indigenous people acting creatively and often resistively in the unfolding dialectic between world-systemic processes and local culture” (1991: 359). The culture category contains studies in which “center stage
is held by culture, ideationally conceptualized (158): culture as comprised of symbolic systems, as text, as in some manner structured” (1991: 359-360).

As noted above, Krech felt that there was a crisis “over what ethnohistory comprises” (1991: 349). Recent changes in the nature and breadth of the subject matter of the contributing disciplines of ethnohistory, confusion over the various labels applied to similar research projects in different regions of the world, and growing concerns over giving voice to the subjects of study had led to Krech’s crisis of definition in the field.

Regarding the latter issue, Krech noted:

There are sharp disagreements over what constitutes ethnohistory. Schieffelin & Gewertz (266:3) succinctly expressed reservations that others share: “For historians [and many anthropologists] ‘ethnohistory’ has traditionally meant the reconstruction of the history of a people who previously had no written history. . . . [We] find this notion of ethnohistory insufficient, if not faulty. For [us] ethnohistory . . . must fundamentally take into account the people’s own sense of how events are constituted, and their ways of culturally constructing the past.” (Krech 1991: 348-349)

Schieffelin & Gewertz’ statement raises concerns over the nature and very definition of ethnohistory. They are apparently among the proponents of limiting the use of the term ethnohistory to research that is part of ethnosience, or that is conducted from the perspective of ethnosience. Carmack (1972:239) identified this type of research as part of ethnohistory in 1972 with his “folk history” category of ethnohistorical research. His other two categories of specific history and historical ethnography, however, represented studies that seek to reconstruct the history of groups and cultures rather than to document or analyze their own historiography. These are studies undertaken from other than the ethnosience perspective.
Carmack recognized that, in 1972, the field overlapped ethnoscience but also that much of ethnohistory to that point had lain outside of ethnoscience. That is, much ethnohistory had not been analogous to research in other ethnosciences by studying the historical belief-system and its component theories of the group (see Blaut 1979: 3). Although he noted that “the study of folk history would be a literal meaning of the word ethnohistory, the history of ethnic groups or cultures, and used in this fashion it would be similar to such terms as ethnomedicine, ethnobotany, ethnomusicology, and the like.” Carmack (1972: 239) made no case for excluding specific history or historical ethnography from the field. Folk history was simply seen as one of the components of a larger field.

By 1991, however, Krech declared that “a crisis exists over what ethnohistory comprises” and this crisis seems to revolve around the relationship of ethnohistory with history, anthropology and ethnoscience (1991: 349). Research that has been classified as ethnohistory, it was argued, could just as easily be classified as either a type of history or anthropology. At most, perhaps only studies of the type classified by Carmack as folk history should retain the designation of ethnohistory “as a cognate of such other ethno-terms as ethnobotany and ethnoscience: ethnohistory as indigenous conceptions of history, or indigenous historiography” (Krech 1991: 365). Krech concluded that it may be ill-advised to continue to use “ethnohistory” as we have used it in the past. Both anthropological history and historical anthropology substitute well for ethnohistory without stigma or illogic, and one’s training in anthropology should not prevent one from writing an anthropological history (or plain history for that matter), just as training in history should not preclude production of a historical anthropology. (Krech 1991: 365)
His rejection of the term in favor of more discipline-specific labels while not wanting to restrict ethnohistory practitioners to the methods and perspectives of their primary discipline contrasts interestingly to Cline's summation of the state of ethnohistory in the early 1970s in which the broad application of the term to a variety of co-traditions was not seen as a problem and the combined contributions of researchers working chiefly from the perspective of their primary discipline was seen as a synergistic strength of the overarching endeavor:

Thus in a pluralistic academic universe, various co-traditions of ethnohistory currently flourish, more often as allies than as adversaries. Modes preferred by anthropologists and geographers are not disdained by historians, nor is the reverse any less true. But it is still worth stressing that parallelism, not absolute congruence, is involved. There are many overlapping spheres . . . but there are also some important differences. (Cline 1972a: 14)

Ethnogeography

As we see, then, ethnohistory is best conceived of as a set of methods and techniques taken from ethnology and history that, together, present a fuller picture than either approach alone provides. It is a means of adding time depth and historical control to ethnological studies. Ethnogeography is not entirely analogous to ethnohistory in this respect. It is not merely a set of methods and techniques taken from ethnology and geography but is a geographic study focused on the traditional topic of ethnology, the culture group. Rather than focusing on elements of culture or cultural processes per se, however, it is concerned primarily with the geographic patterns and environmental relations of a particular culture group. It also often contains a historical dimension. Ethnogeography therefore lies at the intersection of geography, ethnography, and
history. It is a set of methods and techniques taken from each of these disciplines that presents a diachronic view of the geography of a culture group. The diachronic view often necessitates consideration of the activities of neighboring culture groups and their relations with the group under study. With its focus on the group, rather than on cultural elements or wholes, ethnogeography, particularly as practiced in Latin America, seems to overlap ethnohistory where both are concerned with writing Carmack's specific history or culture history.

Cline saw ethnogeography as one of many varieties or subtypes of ethnohistory, one which is practiced from the perspective of the discipline of geography:

In some ways nearer to the works on ethnohistory by historians than to those by anthropologists are certain writings on ethnogeography, a term covering various studies. . . . Geographers have reconstructed the earlier phases of the human geography of parts of Middle America, primarily through critical use of documents, generally with considerable attention to previous native patterns and their latter changes under varying conditions. . . . As in the case of anthropologists, these writings on historical geography or ethnogeography employ historical sources and techniques, but the syntheses generally are dictated by conceptual lines of their primary disciplinary concerns (Hartshorne, 1939, pp. 184-88). (Cline 1972a: 12)

Among the “disciplinary concerns” of historical ethnogeographers, Cline highlighted their prominent use of the concept of sequent occupance:

The basic theoretical construct underlying such approaches has been called “sequent occupance” by geographers, a term coined by Whittlesey. It is a study of how one group following another, with varying cultural backgrounds, outlooks, and needs, changes utilization of the same habitat. . . . Whittlesey noted the growing need for such studies, as an aid to a full comprehension of both geography and history. . . . He stated that historical geography was being redefined by geographers to add time depth to their traditional concerns, and summarized the approach as “the geography of chosen periods of the past” (Whittlesey, 1945, p. 31). (Cline 1972a: 12-13)
Cline (1972a: 12) also identified two meanings associated with the term ethnogeography—that of "historical geography," with connotations of the historical geography of native peoples," with which he was primarily concerned as a variety of ethnohistory, and that of "folk geography," i.e., how native peoples organize geographical knowledge, as well as studies of native toponymy, and aspects of cultural ecology." He thereby provided an important distinction between two related and sometimes overlapping types of ethnogeographic study that he labeled "historical geography" and "folk geography." Historical ethnogeography would be primarily concerned with diachronic and synchronic historical studies of folk groups. Folk ethnogeography would be concerned, in part, with the ethnoscience-related aspects of the geography of folk groups; an arena that encompasses a broad range of topics (cf. Davidson, Knight, and Blaut below). Cline also indicated that "aspects of cultural ecology" are included in folk ethnogeography. Cultural ecology likewise addresses diverse topics ranging from folk cognition to delimitation and description of current and traditional cultural-ecological patterns and on to political-ecological considerations. Of course, each of these is in turn a possible concern of historical ethnogeography, particularly diachronic studies focusing on change.

It is probably fair to say that in the work of ethnogeographers, studies of the recent and present geographic situations of ethnic groups are usually classified as ethnogeography while studies of their more distant past geographic situations are often likely to be referred to as ethnohistoric studies but there is certainly no hard and fast distinction. Davidson's (1980) article on the Garifuna of Pearl Lagoon, Nicaragua,
which considers this group from the time of its first arrival in the area in the latter
nineteenth century to the present, is titled an ethnohistory. His survey of the Garifuna
throughout Central America considers the group from its ethnogenesis before 1700 to its
present distribution and is subtitled "Ethnohistorical and Geographical Foundations"

Ethnogeography can be said to be somewhat less established as a distinct field of
investigation than is ethnohistory. Fewer works appear that claim to be works of
ethnogeography than do works of ethnohistory and there exists no journal dedicated to
ethnogeographic research as does for ethnohistory. Nevertheless some geographers do
recognize ethnogeography as a subset of geographic research, although even within this
small group there is apparent disagreement over the proper focus of ethnogeographic
investigation. As within ethnohistory, some ethnogeographers encourage a move from
traditional to more modern topics as will be seen below.

The use of the term ethnogeography in North American geographic literature was
traced by Davidson back to students of Kroeber and Sauer, the first usage cited as being
S.A. Barrett's *The Ethno-Geography of the Pomo and Neighboring Indians* in 1908.
Davidson noted that "all early studies have a distinctly descriptive and historical flavor"
(Davidson 1977: 283). Barrett’s statement of purpose makes it clear that he is
concerned with describing the historical areal distribution of a linguistic group:

The chief purpose of the present investigation has been to establish the aboriginal
territorial boundaries of the Pomo linguistic stock, and to determine the number of
dialects of this stock, their relationships one to another, the exact limits of the area
in which each was spoken, and the locations of the various ancient and modern
villages and camp sites. (Barrett 1908: 7)
In a later ethnogeographic study on the same group, Stewart expanded the scope of investigation somewhat by expressing interest in aspects of the cultural ecology of the Pomo:

>a broader geographical view has been taken than that by Barrett in his early monograph. The main purpose of this paper is to determine more exactly the extent of probable subdivisions, indicated by Kroeber in the map of the Pomo in his Handbook of the Indians of California. . . . Also, since a geographical study leads to a better understanding of the life of a people inasmuch as life is influenced by environment, the secondary purpose of this paper is to give information concerning foods - their sources, kinds, and methods of obtainment, - shelters, and other features characterizing the Pomo Indians. (Stewart 1943: 29)

Davidson summarized the content and focus of the field based upon the work of such early exemplars. He noted that

>As defined from these early works, ethnogeography refers to the study of an aboriginal, non-literate, or folk group, that focuses on (1) delimitation of culture regions, (2) description of a group's habitat, (3) the distribution of sub-groupings of the culture group, and (4) how a population lived off its lands. All early studies have a distinctly descriptive and historical flavor. (Davidson 1977: 283)

These four foci and Stewart's statement of purpose indicate that traditional ethnogeography emphasized exactly the three topics of cultural geography that are held in common by each of the schemes presented earlier—culture region, cultural ecology, and cultural landscape—in studies of traditional ethnic groups.

In proposing something of a research agenda or methodology for coastal ethnogeography in Central America in his article, Davidson defined the parameters of such studies as dealing with "traditional, rural, and relatively homogenous" culture groups that inhabit and utilize shorelines and coastal environments (1977: 278).

Ethnogeography is here seen, therefore, to focus on folk populations. Davidson also
highlighted two themes that encompass the “special concerns of the ethnogeographical approach” in coastal settings; the physical environment which provides several habitats or resource use zones for the occupants and the distinctive cultural landscapes to be found there (1977: 278). The historical dimension of ethnogeography is not highlighted in Davidson’s 1977 article. Indeed, he noted that “information on coastal folk is obtained from extended field observations. Therefore, most techniques are similar to those employed traditionally by ethnographers” (1977: 278). Elsewhere, however, he reviewed “Recent Ethnogeography on Historic Latin America” for CLAG’s 1980 Benchmark publication in which he included for consideration “Any study by a North American geographer that focused on the post-Columbian activities of a non-Latino society” (Davidson 1981: 198). Obviously there is concern for historical events in ethnogeography and documents as well as ethnography provide source material for these investigations.

Traditional ethnogeography and ethnohistory, then, can be seen to share certain qualities and characteristics but also to diverge in other areas. Traditional ethnogeography and ethnohistory share primarily their focus on folk cultures. Their differences relate to the differences in focus and perspective of their constituent disciplines. Traditional ethnohistory focuses on culture traits, structure, and processes; traditional ethnogeography focuses on geographic patterns and landscapes of culture groups.

The relationship between traditional ethnogeography and ethnohistory can be seen in the comparison of Davidson’s foci of ethnogeography with Sturtevant’s
dimensions of ethnohistory. While ethnohistory focuses "on the past condition of cultures" (Carmack 1972: 230) ethnogeography focuses on past and present geographical and ecological conditions of culture groups. Ethnogeography, like ethnohistory, uses oral and written traditions as a primary data source, but also often utilizes current ethnographic and government collected data to establish present geographic conditions. And while ethnohistory emphasizes "change over time in the cultures studied" (Carmack 1972: 230) ethnogeography is often concerned with changes over time in the geographic patterns, landscapes, and cultural ecology of the culture groups studied. Both fields can produce diachronic and synchronic descriptions of the culture or geography of a group. In synchronic re-creations the concern with change over time is implicit in that the re-creation can be compared to the current situation. The subjects of study and products of research in ethnogeography also parallel those of ethnohistory. Carmack's (1972: 235) ethnohistoric classifications of "specific history, historical ethnography, and folk history" which Krech (1991: 348) defined respectively as "diachronic ethnohistorical study (including the archaeologist's direct historical approach) explicated by working (and projecting) 'upstream' from the present to the past or 'downstream' from the earliest to the most recent period," "synchronic reconstruction of a culture or society at some past moment," and "historiography in non-literate societies" can be permuted into specific ethnogeography, or the diachronic study of the geography of an ethnic group, historical ethnogeography, or the synchronic reconstruction of the geography of a culture group at some past moment, and folk geography of a culture group.
By way of differentiating ethnogeography from is contributing disciplines and conversely, recognizing the contributions of each, ethnogeography utilizes data provided by, and techniques and methodologies developed in, history, ethnography/anthropology, and geography. Fundamentally, ethnogeography must adopt the perspectives of geography and show a concern for spatial relationships, human-environment interactions, and the expression of these in the landscape. Ethnogeography utilizes field methods of ethnography for data collection and, especially in folk geography, for interpretation. Davidson noted, however, that "research in ethnogeography departs from other ethnographic study in scale and focus" (1977:278). Perhaps ethnogeography relates to history in the same manner as does ethnohistory. It utilizes techniques of history to provide "cautious accuracy" (Krech 1991:348) to its endeavor. In sum, ethnogeography utilizes techniques of geography, ethnography, and history to illuminate synchronic and diachronic studies of ethnic groups.

The comparison of traditional ethnogeographic and ethnohistoric research provides an overview of the purposes, aims, objectives, and content of ethnogeography as traditionally conceived. As we saw in Krech's history of ethnohistory, however, ethnogeography, or work that could be called ethnogeography, has also seen a shift from primarily descriptive to analytical and processual studies. New concerns, indeed new paradigms, that have arisen in the latter half of this century have led to geographic research on ethnic groups that focuses more upon their relationships with neighboring, often dominant, groups and societies, and upon analyzing the causes and processes of change that traditional ethnogeography may have been content to describe and
document. That is, they focus more on the why than on the what, where, or how questions concerning the group. Works that could be classified as ethnogeography are now often classified as cultural ecology or political ecology. Of course research that focuses on the why must necessarily rest upon prior documentation of the what, where, and how. This dissertation seeks to establish a baseline of what, where, and how regarding the Pech from which future research may address the why more adequately.

Also like ethnohistory, ethnogeography has experienced a movement toward redefinition, especially to redefine it as part of ethnoscience. Davidson noted that

Within the last decade, ethnogeography has reappeared in the geographical literature with a quite different meaning. Derived from the ideas of cognitive anthropology (Tyler, 1969) and those engaged in other ethno-sciences (Sturtevant, 1964), most modern geographers follow the usage proposed by Knight (1971,p.48). (Davidson 1977:283)

It is uncertain that those who consciously define ethnogeography as ethnoscience do so in rejection of traditional ethnogeography as a valid and valued endeavor or as a (relatively) discrete field, as seems to have been the case in the debate over ethnohistory. Rather, modern ethnogeographers seem to start from the concept of ethnoscience and apply it to geography in an attempt to discern, describe, or point out how geography can utilize or contribute to the ethnosciences with little recognition that works of cultural-historical ethnogeography have previously been conducted. Perhaps because there is scant complaint from traditional ethnogeographers to the coopting of the term, there is little need for modern ethnogeographers to defend against them or to reject them. Perhaps also modern ethnogeographers feel that battle is already won or that there is no battle to be fought over the proper content and conduct of ethnogeography.
There is certainly, however, some overlap between the work of modern and traditional ethnogeographers. Knight considered the role of ethnogeography with a concern about the practical application of geography to rural development projects. He believed that ethnogeography mattered in these projects because it “is the critical linkage between man, his behavior, and the environment from which he seeks sustenance” (1971: 51). Ethnogeography as geographical perception, then, was seen as a crucial part of the human-environment relationship and, therefore, also of the cultural landscape.

Traditional concerns of cultural geography and ethnogeography are therefore found in Knight’s modern ethnogeography and are evident in his definition of the field:

By ethnogeography I refer to a society’s perception of the environment of which it is a part, its understanding of natural and cultural processes which create spatial patterns. . . . When we look at the ethnogeography of a particular people, we are concerned with their world view; their understanding of perceived environmental processes and patterns; the spatial organization they mentally and physically impose on the landscape; their repertoire of resource managing techniques; and their rational for applying techniques to different portions of the environment....Ethnogeography is a society’s perception, a cultural expression that is passed from generation to generation through enculturation, is amplified by experience, and is at the same time a probabilistic statement of the perception of individuals. (Knight 1971: 48)

Thus we see that Knight’s ethnogeography is not particularly concerned with delimiting historic or modern regions of culture groups, but it does share the traditional ethnogeography components discerned by Davidson of “description of a group’s habitat”, albeit in the study group’s own terms, and “how a population lived off its lands” (Davidson 1977: 283). Knight’s view of ethnogeography as perception also shows concern for “the types of physical environments that can be put to different uses by man” and unique “manmade landscapes” which are two themes that Davidson (1977:}
278) identified as central to traditional ethnogeographic studies of current populations. Knight’s ethnogeography not only ignores some aspects of traditional ethnogeography, it also expands consideration to new areas such as a farmer’s “perceptual probability structure” and “the premises and logic with which he is operating” that affect the decision to adopt new development strategies (Knight 1971: 50).

Knight is concerned with development; with present conditions and how to effect change for the better in the future. He therefore sees value in idiosyncratic ethnogeography of current populations to better ensure success of development projects. He supported Hunter’s view that national development plans “have to be the sum of a very large series of local plans . . . it is impossible to establish a single set of priorities which will cover all cases” (Hunter 1969: 124 in Knight 1971: 51). Such research, however, not only serves as a synchronic benchmark from which to depart for the future. For history minded researchers, it also serves as a benchmark by which to gauge change from the past or from which to depart in recreating past conditions of the group under study—Krech’s (1991: 348) upstreamed historical ethnography. It can, therefore, play a role in traditional ethnogeography’s efforts to delimit past regions. It occupies a pivotal position between the “pure research” of the historical geographer and the “applied research” of the development geographer. For the traditional ethnohistorian and ethnogeographer, local studies provide the foundation for historical reconstructions at broader scales.

Knight’s conception of ethnogeography as perception, then, shows considerable overlap with, and some departure from, the concerns of Davidson’s traditional...
ethnogeography. He encouraged the recognition of folk geographies as real, functional systems based on the lived experience of societies and expressed in the landscapes they inhabit. Consequently, he encouraged greater effort in their documentation, in their amplification "with existing ecological and agronomic information" to determine development possibilities, and in their use in the creation and interpretation of development projects which would provide "the opportunity for [farmers] to understand innovation within an accustomed framework" (1971: 51).

Not all proponents of ethnogeography as ethnoscience, however, maintain such close relationships with the traditional concerns of ethnogeography. Blaut (1979: 2) presented a view of ethnogeography in which it is conceived of as wholly within the realm of ethnoscience and is ultimately concerned with issues of "geographical cognition" rather than delimiting regions or describing human-environment relations and landscapes. He stated that

The subject matter of ethnogeography is the set of all geographical beliefs held by the members of a definite human group at a definite time. . . . [which] forms a belief-system. . . . [and which] is examined . . . from at least three points of view: What are its properties — its contents, structure, and dynamics? How does it interact with other aspects of the group's culture — how is it bound to that culture? And what does it do for (and to) our theories about geographical cognition in general? (Blaut 1979: 2)

Blaut (1979: 3) explained that the belief-system of a group is made up of subsystems which he labels "theories" and which are in turn composed of "elementary beliefs" that can be discovered through ethnogeographic research. He emphasized that "the notion of belief-systems, at various levels of complexity, is the more central concept in
ethnogeography; the ultimate particles of belief . . . are end-products of research; the results primarily of disaggregation, not aggregation” (1979: 3).

Perhaps the various conceptions of ethnogeography from traditional to ethnoscience reviewed here are best distinguished on the basis of their research aims or goals, of the level of the belief-system with which they are concerned, and of which of Blaut’s points of view they adopt in conducting ethnogeographic research. They share, albeit at various levels of recognition and for different purposes, an interest in a group’s perception of its geography or environment. More traditional ethnogeography from Barrett to Davidson is concerned with delimiting regions, from the level of the culture group to that of resource use zones at the village level, and describing culture groups in the past and present. These subjects are tied to the group’s perception of what lands it owns, or can exploit, and of the appropriate uses for differing portions of those lands. Delimiting the regions at various scales and describing the landscapes of the group depend ultimately on its relationship to the environment which, as Knight pointed out, are linked via perception. It is not the group’s perceptions or beliefs that are the primary focus of research, however, it is their expression in the landscape. Even if a traditional ethnogeographer obtains data through observations of material culture and landscape rather than through ethnographic interviewing about belief and perception concerning topics such as land use categories, the observed landscapes are themselves products of perception. Ethnogeographers in development, such as Knight explicitly seek to understand a group’s perception and beliefs for the purpose of changing behavior in some way for the better. They take into account other aspects of perception, other
theories of the group’s ethnogeography such as risk and vulnerability, that were of little
direct interest to traditional ethnogeographers but which in some way bear on the
potential success of their development projects. Knight does not appear to have the
explication of geographic cognition or the description and analysis of belief-systems as
his goal. He is interested in understanding “the rationality of the farmer . . . the premises
and logic with which he is operating” since “we can only place ourselves within the
farmer’s conception of resources, risks, and rationality by understanding his
ethnogeography” (1971: 50). He appears, then, to be interested in the study of belief-
systems as a means of understanding current behavior with the ultimate goal of effecting
some change in that behavior rather than conducting a study of comparative cognition.
He may be most interested in the various component theories or subsystems of the
environment and risk which help determine a farmer’s behavior. By understanding these
theories, and their connections, he hopes to be better able to craft projects that are
compatible with them or, perhaps, to better convince farmers to reject them in favor of
new theories. Blaut, on the other hand, is explicitly interested in belief-systems, which
are constructed from theories, elemental beliefs, and perceptions, as the basic data for
comparative cognition studies. As much is obvious in his identification of three uses for
ethnogeographic study: 1. it is a non-ethnocentric approach “to the general and cross-
cultural study of geographical cognition” (Blaut 1979: 5), 2. it provides (and utilizes for
analysis) data that are “concrete, artifactual records” of the group’s belief statements,
theories, and belief-system (Blaut 1979: 6), and 3. it can be used to “examine our own
beliefs and their cultural and social bindings” (Blaut 1979: 6).
Summation

This introduction, it is hoped, has served to orient the reader in terms of the disciplinary approaches from which this dissertation proceeds. The methods and perspectives of cultural geography, ethnohistory, and ethnogeography will be utilized herein to examine recent changes to the historic geographical patterns of an indigenous culture group occupying a rapidly-developing emergent area on the Central American isthmus—the Pech Indians of eastern Honduras.
CHAPTER 2
Regional Background

Introduction

The dominant geographical process characterizing the life of the Pech in the twentieth century has undoubtedly been territorial reduction. The Pech have continually lost control over, and access to, lands which they previously controlled. This process did not begin in the 1900s, however. Since the arrival of the Europeans, the Pech, as well as most other indigenous groups, have witnessed the contraction of their territory. To understand the magnitude of Pech territorial reduction involves considerations of both pre-Columbian culture regions and the impact of the colonizers. The pre-Columbian Pech region provides a starting point from which to trace territorial reduction through the colonial and independent periods to the present.

Prior to the arrival of the Spaniards, Honduras, where occupied, was controlled by native American culture groups. The culture boundaries were not static, of course, as some native groups expanded their territory at the expense of others at various times. The Pech were one of more than 30 different cultural groups to inhabit Honduras at Contact, and therefore controlled only a portion of this space (Davidson, 1991: 207). Although it is conceivable that the Pech culture region might have been larger at some point prior to contact, the area inhabited by the Pech at contact will serve as an
indication of their maximum territorial extent—the lands from which they have been alienated since Spanish arrival.

The coming of the Spanish colonizers introduced a new competitor for control of the land and its resources. For most indigenous groups, the primary territorial conflict would no longer be with neighboring Indians. Rather, most native cultures found their territory falling under control of the newcomers. The Pech, like many other groups, were forced to retreat or live under the control of the colonists in what used to be their territory as the Spanish presence spread.

Cultural Heritage of Lower Central America

The Pech prior to European contact were inhabitants of the region defined by anthropologists as "lower Central America" (Lange and Stone 1984a; Helms 1976; Helms 1992). Their lands lay outside of the Mesoamerican high-culture region as it is commonly delimited by anthropologists. Mesoamerica, at Contact, was under the control of the Aztec, Tarascan, and Mayan peoples from central Mexico to western Honduras and down the Pacific coast to the Nicoya Peninsula of Costa Rica (West 1993: 40-41). The indigenous inhabitants of the Mesoamerican culture region shared "several key cultural attributes" (West 1993: 40) that distinguished these more advanced societies from their surrounding, lesser-developed neighbors, including:

1. a highly stratified social class system, in which a small group of nobles and priests held tight control over a large proletariat for public labor, tribute, or civic duties;
2. the concept of a political state, forged by organized military operations;
3. intensive cultivation techniques, which could produce an abundant and stable food supply;
4. the use of metals, primarily gold and silver for ceremonial ornamentation and secondarily some of the lesser metals (copper and bronze) for utilitarian purposes; and
5. the growth of true cities, characterized by large
concentrations of populations, urban functions such as manufacturing and various public services, and the presence of monumental architecture. (West 1993: 40)

Central America at the time of Contact was divided between the two macro-scale culture areas of Mesoamerica and the Intermediate Area. Its northern part, containing Guatemala, Belize and El Salvador, were part of the high-culture area of Mesoamerica, while lower Central America, including much of Honduras, most of Nicaragua and Costa Rica, and Panama, was within the lesser-developed Intermediate Area. Lower Central America, as a culture region distinct from Mesoamerica, evidenced somewhat different culture traits and the aboriginal Pech shared in this lower Central American culture complex. Like the rest of the Intermediate Area, lower Central America was inhabited by culture groups that did not possess such key cultural attributes as highly stratified societies, political organization at the state level, intensive agricultural cultivation techniques, metallurgy, or large urban centers, to any great extent. It must be noted, however, that lower Central America has been much less studied than Mesoamerica and that evidence of a greater presence of these traits among lower Central American cultures may yet be found. For example, Helms (1992: 195) noted Snarskis' (1981:54) report that metallurgical techniques were introduced into Costa Rica from Colombia and Panama after A.D. 500. Most researchers to date, however, (including Helms) seem to recognize, either implicitly or explicitly, the aboriginal regional distinction between Mesoamerica and lower Central America based upon the presence or absence, or relative scarcity, of cultural characteristics such as those presented by West. We should, then,
consider briefly some of the shared cultural characteristics of the inhabitants of aboriginal lower Central America, including the Pech.

Most of the groups inhabiting lower Central America at Contact are believed to have migrated northward from the area of modern Colombia at some time in the past, bringing their Chibchan-related languages and “Amazonian-type farming based on slash-and-burn cultivation of root crops” with them (West 1993: 38). This diffusion of South American derived language and cultural ecological traits into lower Central America provides the basis for several distinguishing characteristics that differentiate Mesoamerica from lower Central America. It is uncertain exactly when the South Americans first came to Central America but Chapman reported that linguistic study indicates that the eastern Honduran and Nicaraguan groups included in her study migrated into the area “several thousand years before the Christian era” (1958: 4). She later postulated, with only slightly greater specificity, that they arrived “as early as perhaps the third millennium B.C.” (1958: 165).

Besides these two authors, many others recognize the South American connections of most lower Central American aboriginal groups, usually based upon linguistic evidence. Indeed, Chapman (1958:15) and Sharer (1984: 79) equated the aboriginal culture area boundary at contact with the limits of the distribution of Mesoamerican language speakers down the Pacific coast of Central America as far as the Nicoya Peninsula of Costa Rica. Likewise, Stone (1992: 192) described the lower Central American-Mesoamerican border as “the approximate southern limit of Mesoamerican-derived or -influenced cultures.” Johnson described the “basic culture”
of the groups inhabiting lower Central America as having “a distinctly South American
cast, and the region marks the northern limit of culture complexes which were probably
derived from South America” (1963: 43). He also noted, however, that the entire region
was influenced by “cultural diffusion from both the north and south” and thus recognized
an important characteristic of lower Central America’s intermediate situation between
South America and Mesoamerica, a topic of concern for many of the authors in Lange
and Stone’s 1984 volume. Helms (1976: 3) also seemed to accept the South American
origins of the lower Central American groups and Healy (1984: 116) recognized
linguistic and archaeological evidence for the distinction between Mesoamerican- and
South American-derived groups on their respective sides of the cultural border within
Honduras. Chapman (1958: 5, 74-75) and Stone (1942: 230) likewise believed that the
archaeological evidence supports the contention that lower Central America was a
northward cultural extension from South America.

In terms of subsistence activities, the aboriginal lower Central American societies
can be differentiated from those of Mesoamerica on the basis of agricultural systems and
crop complexes. West (1993: 37-44) divided the agriculture-practicing parts of Latin
America at contact into areas of simple farming and advanced farming and reviewed
some of the characteristics of each. Lower Central America and certain adjacent parts of
Mesoamerica were classified as areas of simple farming, while most of Mesoamerica and
Andean America were identified as areas of advanced farming. The two systems are
distinguished by the “use of advanced agricultural practices and nearly complete reliance
on domesticated plants and animals for food” in the advanced farming of the high-culture
areas while the simple farmers used rudimentary cultivation techniques and "at least one-half of whose food came from hunting and fishing" (1993: 37).

Although knowledge of the aboriginal culture of many of the groups of, especially northern, lower Central America remains poorly developed (Helms 1992: 193; Healy 1984: 115, 158-159), that they were less advanced agriculturally than those of the culture hearth areas seems to be well accepted by scholars of the area. Chapman's 1958 dissertation is probably the most complete attempt at describing the aboriginal culture of the South American related groups of northern lower Central America using ethnohistoric, linguistic, archaeological, and post-Conquest ethnographic data. She stated that "in contrast to North and South America, in Central America at the time of the Conquest there were no truly primitive peoples; that is, no peoples who depended exclusively on hunting and gathering for sustenance" (1958: 11). As Chapman expanded her description of the subsistence activities of the area she emphasized that the groups of her study area utilized a variety of food procurement strategies when she noted that "there was very little that the Lowland tribes overlooked as a possible source of food. They cultivated, hunted, fished and gathered. They were producers and gleaners" (1958: 96). These views agree with West's mapping of New World aboriginal economies (1993: 35) and his assertion that the simple farmers acquired the balance of their diet from hunting and fishing (1993: 37). Likewise, Chapman was in agreement with West's delimitations when she made it clear that, although these groups were not simple hunter-gatherers, neither were they practicing intensive agriculture. She stated that "the Indians of this region cultivated in the traditional American "slash and burn" method, using stone
axes and fire to clear the fields of trees and undergrowth and the digging stick to plant" (1958: 98). Finally, Chapman called our attention to an important distinction between the subsistence strategies pursued by the peoples inhabiting differing environmental zones within the northern section of lower Central America:

Among the Lowland peoples there were two variants on the farming-hunting-fishing-gathering pattern. Farming was the main subsistence activity of the mountain-dwelling tribes, namely the Jicaque, some of the Paya and Sumu, and the Matagalpa. The coastal tribes—the Miskito and certain tribes of the Paya and Sumu—were more dependent on fishing than on farming. This difference appears to have been one of emphasis. (Chapman 1958: 84)

Other writers agree that northern lower Central America was not an area of agriculturally advanced civilizations. Helms characterized the indigenous cultures of the eastern Honduran and Nicaraguan lowlands as “small tribes of semi-nomadic hunters, fishers and agriculturalists” who “lived along the numerous rivers” and “exploited river resources and cultivated root crops (notably manioc), maize and trees (e.g. *pejibaye* palm), hunted forest and savannah game, and exploited coastal resources” (1992: 193). In his review, Lange (1984: 41-42) cited Tamayo’s (1964: 97) description of aboriginal exploitation of the riverine resources and riverside lands of Mosquitia and noted similarities in the cultural ecological patterns identified for the Upper Amazon, the Olmec area, and the eastern Caribbean coast of Panama in the works of Lathrap (1970), Coe (1979), and Drolet (1980) respectively. Lange added that “the tropical rain forest provided an abundance of wild game, natural resources in wood and other vegetal products, and a wide variety of hallucinogenic and narcotic plants that were important in ritual and perhaps served as bases for regional and long-distance trade” (1984: 42).
Davidson (1985: 66) cited a document from 1690 in which Bishop Vargas y Abarca notes the predominance of hunting, fishing, and gathering in the cultural ecology of the Tolupan, or Jicaque, Indians of northern Honduras. Chapman (1992: 16) reported that by the early nineteenth century these same Indians had been displaced from the plains and valleys by *ladinos* but in their mountain communities they still "subsisted by cultivating, hunting, fishing and gathering wild products. They were still only partially sedentary, since they had to move as the soil became exhausted and the game scarce."

Herlihy has conducted fieldwork among indigenous groups who have only recently begun to face pressures to adapt their traditional cultural ecological patterns to modern systems in two different countries of Central America. The cultural geography of both the Chocó Indians of eastern Panama and the Tawahka Sumu of eastern Honduras has traditionally been characterized by riverine settlement and the practice of a subsistence-oriented economy based upon hunting, fishing, gathering, and shifting cultivation. Both are also now facing pressures associated with the advancement of national settlement frontiers into their traditional territories. Beginning in the 1950s the Chocó have responded with a change in their settlement pattern from more dispersed to more nucleated, village based, settlements to achieve greater recognition and cooperation from the Panamanian government (Herlihy 1985). This settlement consolidation has produced concomitant changes in their resource exploitation patterns at the household level but Herlihy’s research on their current land use shows that, as a culture group, the Chocó still rely upon the subsistence activity components listed above (Herlihy 1989). As contact with the Panamanian national society has increased, however, the Chocó have
not remained purely subsistence oriented. Rather, their articulation with the national economy via the sale of agricultural produce has accelerated (Herlihy 1985: 15-16). The Tawahka Sumu Indians of Honduras have remained isolated from the pressures of the advancing frontier in their country until much more recently, and have thus far undergone less change in their traditional patterns, than has been the experience of the Chocó. "They remain largely subsistence-oriented farmers who depend heavily on hunting, fishing, and gathering. Even now, they are only minimally involved in cash economies. . . ." (Herlihy and Leake 1990: 13). For the Tawahka Sumu, too, Herlihy’s field research has produced a detailed map of land use patterns that delimits the lands utilized by this group for agricultural and hunting-gathering activities (Herlihy 1992, 1993a, 1993b). Efforts are currently under way to acquire legal title to these lands and to establish a biosphere reserve encompassing the area that would protect the surrounding tropical rain forest flora and fauna and, with it, the traditional cultural ecology of the Tawahka Sumu (Herlihy and Leake 1990, Herlihy and Leake 1991, Herlihy 1993a, Herlihy 1993b).

In addition to the relative intensity of their respective agricultural systems, further distinction is often made between the societies of lower Central America and those of Mesoamerica on the basis of the crop complex that characterized each region. Intermediate Area agriculture was characterized by the predominance of vegetatively reproduced tuber crops of South American origin such as cassava, or manioc, and sweet potatoes. In contrast, Mesoamericans practiced a seed crop agriculture, predominately cultivating crops of Mesoamerican origin, especially the trilogy of corn, beans, and
squash. Here again, the distinction is one of relative importance of the diagnostic crops within the total crop complex, as maize was a secondary crop in parts of the Intermediate Area and tubers were of secondary importance within the crop complex of Mesoamericans (West 1993: 38-39). Even in those southeastern Mesoamerican areas that West delimited within the zone of simple farming economies, however, the predominance of the corn-beans-squash dominated complex differentiates the inhabitants from the root-cropping simple farmers of bordering lower Central America (West 1993: 38-39). That is, along those sections of the Mesoamerican–lower Central American frontier that were not demarcated by the change from simple to advanced agro-ecosystems, the distinctive crop complexes produced by the simple farmers of each culture area probably more closely approximated the actual frontier definition than did the intensity of cultivation practices. Chapman (1992: 48) believed that the continued importance of root crops as a basic staple in the diet of the Tolupan Indians in modern times is a surviving trait from their aboriginal culture. Today, these Indians inhabit the area that was lower Central America's northwestern border with Mesoamerica. A little farther to the east, near the probable pre-Contact borders of the Paya, Sumu, and Lenca lands, analysis of bone protein from a recently discovered cave burial at Talgua is reported to indicate that corn was not the subsistence crop of the aboriginal inhabitants (Wilford 1995: A14). Researchers speculate that manioc would have been their subsistence staple.

West also pointed out the impact of the nutritional composition of the two crop complexes, particularly in the provision of proteins, on the overall subsistence strategy
employed by the simple farming groups (1993: 38-39). The lack of plant-supplied protein in the diets of the root croppers increased the importance of hunting and fishing among their subsistence activities. The more nutritionally complete diet of the seed croppers, in contrast, helped to make hunting and fishing "less important among these people than among the forest Indians of South America" (West 1993: 39). The apparent nutritional superiority of the seed crop complex raises the question of why that farming system, and a greater dependence on agriculture as a food source, was not more readily adopted by the northern lower Central American groups. There is no simple, yet complete, answer to this question but here we can identify two sets of factors that probably encouraged these peoples to practice root crop rather than maize-based agriculture—cultural heritage and crop requirements.

As described previously, the ancestors of the northern lower Central American groups, with the exception of the Jicaque, are believed to have migrated from northern South America, specifically "western South America and the eastern Andean slope" (Chapman 1958: 5), where this root cropping system was innovated. The cultural heritage of the South American manioc farmers diffused northward with these migrants who then continued to practice their traditional lifestyle in their new homeland. Writing of these early migrants, Chapman (1958: 8) concluded that "culture-trait analyses of this study indicate that these people had a Tropical Forest type of culture and were sweet manioc farmers." In spite of their proposed origin far to the north of Central America, the Jicaque adopted much of the culture of their lower Central American neighbors, including their subsistence practices, making the Jicaque practically full participants in
the South American cultural heritage. Chapman (1958:5) emphasized this point when she noted that “the Jicaque apparently became assimilated to the culture of the Chibchan at a very early period, as no culture traits were found which indicate a northern homeland.” She also briefly addressed the issue of cultural stability among the groups of northern lower Central America. She proposed that the comparatively isolated situation of these groups reduced their cultural contacts with “the result that the culture retained its historical identity to a much greater degree there than on the Pacific slope,” which she noted “was a region of constant cultural ebb and flow” (1958:165). Of course, as many researchers, including Chapman, have reported, lower Central America was not completely isolated from outside cultural influences. Its relative isolation, therefore, may have been one factor in promoting the cultural stability of northern lower Central America but it should not be thought of as the only, nor even the primary, factor in the cultural maintenance of these groups. That the cultural heritage of these groups has been somewhat resistant to change is attested to by the continued importance of root crop cultivation in the region today (Chapman 1992:48; West 1993:38).

In addition to the importance of tubers as part of the cultural heritage of lower Central America, differences in the cultivation characteristics of the diagnostic crop complexes and in the environmental conditions under which the crops were cultivated may have played a role in the aboriginal preference for the root crop complex in this region. Lange raised the issue of the importance of soil distribution, one of the environmental factors for which maize and manioc have differing requirements and upon which they have differing impacts, in influencing the cultural patterns of aboriginal
groups at both the local and regional scales. He pointed out that "while soil conditions are closely related to landforms and rainfall patterns . . . they have local variability and hence macro and micro significance for subsistence practices and settlement patterns. Selective occupation or avoidance of particular zones because of soil conditions probably affected regional development patterns" (1984: 40). Chapman's distinction between the relative emphasis placed on hunting and fishing versus agriculture among the mountain and coastal dwelling peoples of northern lower Central America mentioned above might be an example of intermediate-scale cultural differences related, in part, to soil distributions. Here, however, we are concerned with the cultural differences in agricultural practices between the peoples of Mesoamerican and lower Central American heritage, that is, regional differentiation at the macro-scale of subsistence practices, and its possible relation to differences in the environmental conditions under which each heritage group lived, specifically the macro-scale pattern of soil distribution. In other words, we are concerned with the apparent correlation between the preferred crop complex as an aboriginal culture trait and the macro-scale soil distribution pattern as an environmental condition. Beyond simple "selective occupation or avoidance of particular zones," the differences between the general characteristics of the soils of the Mesoamerican and northern lower Central American portions of Central America may have played a role in impacting the divergent regional development in terms of having "macro . . . significance for subsistence patterns." Of course, as Lange pointed out, local variability in soil conditions allows for cultural differences at the micro-scale. Care should be taken, therefore, to not assume that a macro-scale correlation between cultural
traits and environmental factors dictates a cultural homogeneity throughout an environmental region. Additionally, factors other than the environment, such as the levels of technology and societal complexity tend to provide increased options for subsistence strategies. As West noted above, maize was cultivated in lower Central America and manioc in Mesoamerica, presumably under local conditions that favored one crop over the other. Willey (1984:366) stated that maize farming was probably a widespread basis for settled farming in lower Central America by A.D. 500. He saw maize farming as an important concomitant in the rise of the chiefdom level of societal organization. While it is difficult to assign a measure of relative importance to each of the interacting factors that influenced the presence of the predominant crop complex in each culture region, we can at least recognize here the macro-scale correlation between this culture trait distribution and the environmental conditions which tended to best satisfy the cultivation requirements of the respective crop complexes.

Concerning the environmental requirements of manioc, the primary cultivar in the root crop complex, Hansen (1983: 114) described it as being “extremely drought resistant and [it] does well in areas where there is a long dry season or rains are sporadic and where the soil is of moderate to poor quality. . . . it can be grown on very poor soils that are unsuitable for other crops. . . .” In his overview of Latin American agriculture Lobb (1993: 128) concurred with this description, noting that “the protein-rich seed crops require larger supplies of nutrients in the ash, litter, and soils than is needed by the starch-rich food crops of vegeculture. . . . Seed-culture systems are therefore often associated with ecosystems in which there is a higher degree of initial soil fertility.”
Manioc-based cultivation, then, may have enjoyed a comparative advantage over maize cultivation by the simple farmers of northern lower Central America who inhabited "a natural environment more challenging than that of the Mesoamerican Nicarao and Chorotea peoples, neighbors to the west, who occupied terrain which was much more suitable for farming" (Chapman 1958: 97). The larger areas of more fertile soils to the west and north of northern lower Central America would have been better capable of supporting the more demanding cropping system while the less fertile soils of much of northern lower Central America would have encouraged the cultivation of the less demanding manioc to supply carbohydrates in conjunction with hunting and fishing to supply dietary proteins.

Detailed soil surveys of eastern Honduras are lacking, but many writers seem to agree that much of northern lower Central America is afflicted with less than optimal agricultural soils (West and Augelli 1976: 427; Morris 1984: 18; Healy 1984: 114; Johannessen 1963: 20-21, 23). Lobb provided a brief description of the most common environmental conditions under which ecosystems with more fertile soils develop. He stated that "such systems often correspond to areas of geologically recent volcanic activity, areas of limestone parent material, or areas where the soils are not excessively leached of nutrients because of heavy amounts of precipitation" (1993: 128). The obverse of these conditions, then, can be assumed to characterize ecosystems that commonly develop less fertile soils. Areas without recent volcanic activity or limestone parent material and that experience intense leaching of nutrients would be assumed to contain less fertile soils in the absence of other mitigating soil building processes.
for the alluvial soils adjacent to river courses, these conditions characterize much of
northern lower Central America.

The correlation of recent volcanic activity, and its associated fertile soils, with
human habitation in general, and with the advanced farming systems of Mesoamerica in
particular, is seen in both the modern and aboriginal population distributions of Central
America. In their text, West and Augelli (1976: 22-34) divide all of Middle America into
11 major physiographic provinces. Only two of these provinces cover portions of lower
Central America; the Old Antillia province and the Volcanic Axis of Central America.
The volcanic axis occupies much of the western edge of Central America from
Guatemala to western Panama while Old Antillia comprises the bulk of Honduras and
Nicaragua to the east of the volcanic axis. West and Augelli (1976: 33) described the
Volcanic Axis of Central America, a physiographic province of still active vulcanism, as
"a continuous line of young volcanoes [that] borders the Pacific edge of Central America
for 800 miles, from the present Mexico-Guatemala frontier to Costa Rica." In southern
Costa Rica, "south of the Meseta Central the volcanic axis is interrupted by a huge
batholith known as the Talamanca Range" but "in Panama, vulcanism resumes with the
volcano of Chiriquí (11,410 feet) and continues in diminishing degree almost to the
Canal Zone" (1976: 33-34). Within the volcanic axis "more than 40 large volcanic peaks
have ejected enormous quantities of ash, cinder, and lava" (1976: 33). The
physiographic province of Old Antillia includes not only northern Central America and
part of southeastern Mexico, but also the islands of the Greater Antilles. West and
Augelli (1976: 31) described it as "the oldest and most complex physiographic and
tectonic area of Middle America" whose surface "is characterized by a series of
east–west-trending mountain ranges and intervening depressions." As expected in an
ancient, much eroded area, the surface geology of Old Antillia is varied and complex
compared to the more homogenous covering of recent volcanic materials found within
the volcanic axis. The Old Antillean upland surfaces are characterized in various
locations by limestone, sandstone, and ancient crystalline rocks. Also within Old
Antillia, West and Augelli (1976: 33) noted that "thick deposits of older volcanic ash and
lava cover much of the southern highlands of Honduras and north-central Nicaragua."
These older volcanic deposits, however, do not produce the fertile soils characteristic of
the more recent volcanism of western Central America (1976: 427). Exacerbating the
division between the zone of recent volcanic deposition to the west and the volcanics-
poor central and eastern portions of northern lower Central America is the effect of the
prevailing winds over the isthmus. Stevens (1964: 310) explained that "the active
volcanoes are very close to the Pacific shore, toward which the showers of ash and
cinders are swept by the trade winds." The generally easterly northeast trades, then, help
to limit the volcanic ash fall, that otherwise could provide added fertility to the eastern
soils far from the volcanoes themselves, to the narrow strip of land between the volcanic
range and the Pacific Ocean. West and Augelli (1976: 35) provide a photograph of the
erupting Nicaraguan volcano Cerro Negro that illustrates the impact of the prevailing
winds. In the photograph, the ash plume is described as being blown "southwestward
across the Pacific coastal plain." Viewed in terms of this physiographic province
division, then, Lobb's environmental condition for fertile soil development of recent
volcanic activity is largely restricted to the Pacific edge of Central America and it is this part of the isthmus that has been most favored for human habitation.

The fertile soils that developed on ash deposits of the volcanic axis have been a locus of settlement since pre-Hispanic times and continue to be so today. West and Augelli (1976: 33) credited those soils with the fact that the volcanic axis' "tropical highland basins and adjacent mountain slopes are the areas of densest settlement within Central America." Maps of Central American population distribution highlight the concentration of modern settlement on the western side of the isthmus (West and Augelli 1976: 380, 382; James and Minkel 1986: 74, 83, 93, 104, 116, 132, 138). Of course, other factors, such as the historical processes of the conquest and colonization and the moderate *tierra templada* climate afforded by the higher elevations of the volcanic range, have also contributed to the modern population distribution but the agriculturally productive soils of the western isthmus certainly played a role in first attracting human settlement and then in making continued occupation feasible. For each of the Central American countries with significant recent volcanic activity West and Augelli noted the importance of sites with soils of volcanic origin to both the aboriginal and modern settlement patterns and economic activities. The southern highlands of Guatemala (1976: 401), the inter-volcano basins of El Salvador (1976: 420), the northwestern portion of the Nicaraguan Depression (1976: 440), and the Meseta Central of Costa Rica (1976: 450) were each identified as areas of significant aboriginal population concentration as well as being the modern core regions of their respective countries. Honduras lies almost entirely outside, and upwind, of the volcanic axis and therefore
“lacks the covering of recent volcanic ash that has created the fertile soils of Central America’s Pacific versant” (1976: 427). Here large upland basins of the interior highlands and the river valleys and coastal plains of the north coast are identified as the favored sites for settlement. West and Augelli stated that “the fertile alluvium of the valleys and adjacent coastal plains [have been] cultivated since pre-Columbian times” (1976: 427-428) but they also noted that Honduras was never densely populated in pre-Conquest times (1976: 429).

The macro-scale pattern of soil distribution, which largely mirrors the delimitation of the two physiographic provinces covering this area, then, manifests an interesting correlation with the distribution of culture areas and agricultural traits in the Mesoamerica-lower Central America frontier zone. The strongest correlation is that between the Volcanic Axis of Central America physiographic province, and its abundant areas of fertile volcanic soils, and West’s region of advanced aboriginal farming. The advanced farming region extends down the Pacific coast from the Isthmus of Tehuantepec in Mexico to the Gulf of Nicoya in Costa Rica. From Guatemala to its southern tip this region appears to be practically confined to the areas of fertile volcanic soils with the exception of the inclusion of the Cuchumatanes region of western Guatemala, an area where Stevens (1964: 308) shows limestone derived soils to be important. From the Honduras–Nicaragua border southward, then, the advanced farming region also approximates the Mesoamerican–lower Central American border and, therefore, the supposed aboriginal border between seed- and root-dominated agriculture. Of course, the volcanic axis extends farther down the isthmus than does the
advanced farming region but the extensive areas of young volcanic soils as delimited by Stephens (1964: 308) actually extend only slightly beyond the Gulf of Nicoya and end in the Meseta Central. This leaves the Meseta Central and its neighboring volcanic slopes to the northwest as a curious outlier of volcanic soils that is excluded from West's advanced farming region as well as from many delimitations of Mesoamerica. The Costa Rican volcanic highlands and the flanks of the Talamanca Range was the site of the chiefdoms of the Huetar culture, however (West and Augelli 1976: 242).

The obverse correlation, that of the Old Antillia physiographic province with West's simple farming region, obviously holds equally well along the Pacific edge of Central America. To the north, however, the advanced farming region does overlap Old Antillia in the Mexican state of Chiapas and the Guatemalan Cuchumatanes where the farming region extends southeastward from the Isthmus of Tehuantepec physiographic province and before entering the Volcanic Axis of Central America province. In summary, then, West's advanced aboriginal farming region correlates well with the Volcanic Axis of Central America where that physiographic province approximates the Mesoamerica–lower Central America boundary while to the northwest, where the volcanic province lies entirely within the bounds of Mesoamerica, the advanced farming region extends well beyond the province boundary into the limestone-derived soils portion of the Old Antillia physiographic province.

The other correlation of interest here is that of the physiographic provinces with the maize- and manioc-dominated crop complex regions, or roughly, the Mesoamerican–lower Central American culture areas. The differing soil fertility
characteristics of the two physiographic provinces would seem to effect the distribution of the crop complexes because of their differing cultivation requirements. As noted above, from the Honduras–Nicaragua border southward there is a strong correlation between the Mesoamerican area and the volcanic axis and, likewise, between the lower Central American area and Old Antillia. North of the Honduras–Nicaragua border, however, these correlations break down as the Mesoamerican area extends into Old Antillia. As noted previously, the Mesoamerican–lower Central American frontier in this zone can be somewhat associated with the distinguishing favored crop complex among the simple farmers on either side of the frontier. Mainland Old Antillia, therefore, is divided between the Mesoamerican seed sowers to the west and the lower Central American root croppers to the east. The correlation between the physiographic provinces and the culture trait of dominant cultivated crop complex is somewhat weaker, therefore, than that between the physiographic provinces and the technological level of farming systems. That is, there is a greater overlap of the seed-crop-dominant Mesoamerican culture area with the Old Antillia physiographic province than there is overlap of the advanced farming region with Old Antillia. In this macro-scale level of analysis, one would expect a stronger correlation between the less demanding manioc-based cropping system and the comparatively less fertile soils of the Old Antillia physiographic province than appears to exist. Undoubtedly many factors contribute to the explanation of the predominance of seed crop agriculture in aboriginal western Old Antillia, including its role in the cultural heritage of the Mesoamericans who controlled western Old Antillia and the historical-geographical situation of the area which was
surrounded by, and an extension of, Mesoamerican territory. In terms of crop
requirements, however, a more localized consideration of soil conditions may shed light
upon the ability of seed crop agriculture to dominate within the western, Mesoamerican,
portions of Old Antillia.

Chapman (1958: 22) hinted at a more localized interpretation when she noted
that the Honduran Mesoamerican-South American "cultural duality is related to its
geographic configuration. While western Honduras is a fertile area of broad river valleys
and intermontane basins, the eastern section is mostly infertile lowlands with a thin layer
of alluvial soil." This broad statement conceals some of the complexity of the situation.
however. Upland basins are found throughout the mountainous western and central
portions of Honduras while the infertile lowlands referred to by Chapman are probably
the Mosquitia lowlands of eastern Honduras. The Mesoamericans, therefore, are
thought to have controlled the western uplands and basins while peoples of South
American cultural heritage such as the Jicaque and Paya are thought to have controlled
the central uplands and basins. Chapman's distinction is misleading, then, because
groups of both Mesoamerican and South American cultural heritages occupied mountain
and upland basin terrain and, therefore, an implied correlation between maize agriculture
and mountain basins and manioc agriculture and the Mosquito lowlands is less than
perfect. While at this point it seems likely that the manioc agriculture of South American
cultural heritage did dominate the eastern lowlands, in spite of their differing cultivation
requirements, maize and manioc agriculture would have both been practiced in the
mountains and upland basins zone. Further, many disagree that the mountains and
upland basins contain particularly fertile soils. It should also be noted that there is apparently disagreement as to the importance of the upland basins of Honduras to the aboriginal peoples. Lange (1984: 48) quoted West’s (1964a: 70) opinion that “in central Honduras and northern Nicaragua flat-floored, grass-covered, highland basins . . . probably never attracted Indians except for hunting.” In contrast, Lange (1984: 49) also noted Healy’s opinion “that the valleys of Otoro, Sensenti, and Comayagua were densely populated.” Of course, the valleys mentioned by Healy are located in western Honduras and are included within some delimitations of Mesoamerica. There may be, therefore, less conflict between the two opinions than at first appears.

Overall, the soils of both the mountains and the upland basins of Honduras are not regarded as being exceptionally fertile. Healy (1984: 114) stated that “except for some areas of the Caribbean lowlands, Honduran soils are generally infertile. Much of the interior mountain zone has shallow soils and is covered in pine and oak forest.” Writing of the areas of savanna vegetation that covered the floors of many of the upland basins at contact, Johannessen (1963: 20) noted that “until recently the savannas of Honduras were used almost exclusively for the raising of livestock” which might suggest some inadequacy for agriculture given that their topography would seem to encourage the use of the basin floor for farming. West and Augelli (1976: 427) agreed that the upland basins, which they call valles, “have been centers for stock raising since the sixteenth century, and some have recently become important for commercial agriculture.” They attributed the limited cultivation of the valle grasslands, which they consider to be the best agricultural lands, primarily to historical reasons since the
indigenous inhabitants "possessing only the stone axe, the dibble, and fire . . . could hardly have worked the tough grassy sod of the more fertile basins" (1976: 432). The colonial period apparently saw little change in the aboriginal pattern, as West and Augelli noted that "the introduction of the plow did not have the effect of making farmland of the valles, however, for the colonial cattle barons forbade the cultivation of their hacienda lands" (1976: 432). Although the valles may have possessed soils better suited for agriculture than the surrounding pine forests, Johannessen (1963: 20-21) recognized the agricultural limitations of the basin floors when he predicted that the commercial production of cotton, corn, and sorghum on the savanna soils would not be sustainable without the addition of fertilizers to the land to supply "nitrates and phosphates, since the level of these nutrients in the native agricultural soil is very low." Chapman, then, seemed to recognize the pattern of a gradient of soil fertility across northern lower Central America with the least fertile soils in the east and the most fertile in the west, lying actually within the Pacific extension of Mesoamerica. Within Honduras, however, the soils of the mountains and valles represent an area of intermediate fertility between those of Mosquitia and those of the volcanic axis. These intermediate lands were, and are, capable of supporting maize cultivation but are less suitable for it than the volcanic soils to the west. It can be supposed that the lower aboriginal population densities and the less intensive aboriginal cultivation system employed in western and central Honduras, in comparison to the volcanic axis, would be a reflection of the lower overall soil fertility in the region. The seed cropping subsistence strategy in Mesoamerican Old Antillia would have exhibited lower population densities because of reduced availability
of areas of high fertility and because of the need to allow longer fallow periods in field rotation to permit soil rejuvenation of the initially less fertile soils.

At a more local scale, however, there are areas in western Honduras that contain soils of better agricultural suitability that could have made maize agriculture more feasible for the Mesoamericans—the alluvial river valleys and coastal plains and the area of limestone derived soils along the upper Río Chamelecón. If there is some contradiction of Chapman's designation of the upland basins of Honduras as being exceptionally fertile, there is more agreement with her recognition of the fertility of the river valleys. Again, however, the distribution of those river valleys is not limited strictly to western Honduras. Healy (1984:115) identified the Caribbean lowlands of the north coast, including “narrow river valleys and floodplains that often extend inland considerable distances” as an important area for aboriginal occupation. He stated that “these valley floors and adjacent coastal plains have rich deposits of fertile alluvium and have been the focus of pre-Columbian activities and habitation. Two of the most significant and productive valleys were the Ulúa in western Honduras and the Aguán in eastern Honduras” (Healy 1984: 115). While the Aguán river valley is believed to have been outside of Mesoamerica at contact, the Ulúa valley had long been an important area for Mesoamerican sites on the very frontier with lower Central America (Lange 1984: 37). West and Augelli (1976: 388, 427-428, 434) likewise highlighted the importance of the fertile soils of the north coast river valleys, particularly on the natural levees, to both the aboriginal and modern populations of Honduras. They noted that “of these productive lowlands, the Ulúa River basin is the most intensively developed” of the river
valleys today (1976: 428). The greater fertility of these river valleys is indicated in part
by their selection as the sites for the establishment of the plantations of the banana
growing industry since the 1860s (West and Augelli 1976: 388-390) as well as the
abundance of archaeological sites discovered along the river courses.

It should be noted, however, that the alluvial soils were not perfectly suited for
maize cultivation. West and Augelli (1976: 388) noted that in “the many river flood
plains of Caribbean Central America . . . the alluvial clay-loam soils of the natural levees
bordering the large rivers lacked only sufficient quantities of nitrogen for the exacting
banana plant.” This agrees with Lange’s (1984: 39) observation that

in Mesoamerica the big lowland tropical rivers that drain from sedimentary areas
with leached soils do not support dense populations on their floodplains and are
not very fertile in terms of the nitrogen necessary for maize agriculture. On the
other hand, rivers that drain from volcanic highlands periodically flood and renew
soil fertility. In these settings civilizations like the Olmec, or very productive areas
like the lower Motagua, emerged.

Lange’s statement, although relating to Mesoamerica, helps to explain the lack of
nitrogen in the alluvial soils along the lower Central American rivers which was noted by
West and Augelli. Eastward of the Motagua River, which reaches the Bay of Honduras
near the Guatemalan-Honduran border, the rivers of northern lower Central America
drain exclusively portions of Old Antillia and their headwaters do not extend into the
volcanic axis along the Pacific edge of the isthmus. They are not able, therefore, to
replenish soil fertility with alluvial deposits of recent volcanic material to the same extent
as the volcanic-highland-draining, Mesoamerican rivers described by Lange. Thus, the
alluvial soils of the Caribbean river valleys of northern lower Central America provide a
better agricultural environment than the surrounding uplands of Old Antillia, but still not such fertile conditions as may be found in the volcanic axis.

Lange's statement identifies specifically the lower valley of the Motagua River as an area whose productivity is attributable to the volcanic characteristics of its headwaters. It therefore may be assumed to possess soils even more suitable for maize agriculture than the river valleys to the east, including that of the Ulúa River. Like other river valleys along the Bay of Honduras, this has been an important area for both aboriginal and modern human activity. It has been a major banana producing zone and along its banks lie the ruins of the Classic Mayan ceremonial center of Quiriguá. Like the Ulúa Valley, the lower Motagua is located within that portion of Old Antillia that West has designated as the aboriginal area that practiced simple farming of seed crops. In accordance with the above discussion of river sediment characteristics, therefore, it represents a substantial area that would be well suited for Mesoamerican maize cultivation that is not immediately obvious upon examination at the macro-scale.

Another such area of greater suitability for aboriginal maize agriculture may have been along the upper reaches of the Chamelecón River in northwestern Honduras. On his soils map, Stevens (1964: 308) identified this as an area of limestone derived soils. As Lobb indicated above, "seed-culture systems are . . . often associated with ecosystems in which there is a higher degree of initial soil fertility" (1993: 128) and limestone parent material is one of the environmental characteristics that is often associated with such fertile ecosystems. This zone of limestone soils lies between the
lower Motagua and Ulúa river valleys discussed above and, like those, is potentially an intermediate-scale area that would be more suitable for aboriginal maize cultivation.

In addition to the larger areas within Old Antillia suggested above as localized zones that would support maize agriculture better than the average throughout Old Antillia, at the micro-scale, there are other areas of local suitability for the more demanding crop complex. These include smaller areas of limestone soils and the floodplains, or vegas, of rivers in mountain valleys and upland basins.

As West pointed out above, maize was grown in the Intermediate Area, as was manioc in Mesoamerica. The most human scale at which to view the cultivation distribution of the two crops would be, then, the micro-scale. Any one farmer or village that cultivated both crops would identify the best soils on which to plant the respective plants within the area available to them. Within their own lands, farmers might distinguish between fertility levels of the soils and plant maize on the more fertile areas and manioc on the lesser soils. We have been considering, however, the distribution of the maize- and manioc-dominated crop complexes, which are themselves elements in of the cultural heritages of Mesoamerica and the Intermediate Area, in relation to the physical environment at the largest scale in an attempt to discern whether the divergent cultivation requirements of the two crop complexes may have played a role in influencing their aboriginal distributions. Within the two physiographic provinces that cover most of Central America, West's region of advanced Mesoamerican farming is found in western Old Antillia and throughout the volcanic axis, his simple farming of root crops region covers eastern mainland Old Antillia, and his simple farming of seed crops region
occupies the central portion of mainland Old Antillia between the regions of advanced seed cropping and simple root cropping.
CHAPTER 3

The Pech Culture Region at Spanish Contact (1502)

Introduction

The loss of territory on which to live and practice their traditional modes of subsistence has been a dominant geographical process in the life of the Pech culture group since at least the arrival of Europeans on mainland Central America. As such, an examination of the territorial reduction of the Pech since Contact should be an integral part of any study of Pech cultural geography. Such an analysis is not as straightforward as might be assumed, however, given limitations in the data thus far available to us.

Ideally it would be a relatively simple procedure to compare the Pech region at Contact with the Pech region today to gain an understanding of the overall magnitude of territorial reduction. Sparse documentation of the locations of Pech settlements at Contact and during the colonial period, however, leave us without a firm baseline from which to measure subsequent land loss. Therefore estimates of the Contact Pech region as reconstructed by linguists, archaeologists, and ethnohistorians must be used as approximate delimitations of the Pech region’s maximum territorial extent. Although these estimates share a certain common ground, differing interpretations of the available evidence have led to a good deal of variation in the specific delimitations. This leaves us with a somewhat ambiguous starting point from which to make comparisons.
Field work has provided a good estimation of the lands inhabited by and utilized by the Pech today, but here, too, there are difficulties in defining exactly what the Pech region is, that is, in delimiting the modern Pech region. Issues such as the fragmented nature of Pech landholdings, with intervening non-Pech occupants holding lands between Pech settlements, continuing in-migration that reduces the relative proportion of Pech in the general population, varying intensity of exploitation by the Pech on lands utilized by them, and competing land claims by ladinos as well as by the local and national governments all complicate the delimitation of any formal Pech region.

Given an ambiguous baseline and a less than ideal modern formal region, any conclusions concerning Pech territorial reduction will be both tentative and debatable. Nevertheless, by using the available data to examine the changes to the Pech region we can, I believe, gain an understanding of the overall magnitude of territorial reduction as well as insight into related processes that have impacted Pech cultural geography. Changes wrought by, or concomitant with, territorial reduction in areas such as settlement pattern and migration, cultural ecology, and social status and cultural survival will be considered further in subsequent chapters.

**Discerning a Pech Contact Region**

At Contact, one hundred percent of the occupied territory of eastern Honduras, like the rest of the territory of the Americas, was under the control of Native American peoples. Eastern Honduras was not, however, under the exclusive control of the Pech Indians. However, not only is it not possible to determine with certainty the exact boundaries of the territories of each of the indigenous groups inhabiting pre-Columbian
eastern Honduras, it has yet to be determined exactly how many distinct groups lived in
the area at that time and what they were called (García Añoveros 1988: 48). Conzemius
stated that, in addition to the current Miskito, Sumu, Paya, and Rama inhabitants of the
Mosquito Coast and the more recently linguistically extinct Matagalpa,

A number of other tribes have been reported from the country under consideration
in former days, but as they have been extinct for some time it has been impossible
to classify them. Some of the tribal designations applied by the early authors are
merely derived from the rivers upon which the tribes lived. (Conzemius 1932: 6)

In terms of numbers of groups mentioned in historical documents, Davidson reported
that Vázquez could identify more than 30 groups in the country in the late seventeenth
Vázquez’ list of native groups of Taguzgalpa and Tologalpa, which included 29 names
followed by “y otras muchas. . . .” Chapman (1978: 9) also reported that a document
from the priests Ovalle y Guevara mentioned ten specific groups “y otros muchos” in the
area and that, in what surely must be an exaggeration, the priest Espino claimed that “en
el valle de Olancho había más de doscientas diferentes naciones e idiomas.”

Over the years, several scholars have attempted to reconstruct the Contact
situation of one or more of these groups and their territories, but the results always show
far fewer total culture groups and regions than the numbers reported above indicate
should be represented. These reconstructions seem to attempt to extrapolate backward
in time in that they assign all of the land to ancestors of the indigenous groups surviving
today in the region, or at least to the groups which were known with some certainty to
have lived in the area. This may be legitimate, however, because, as Conzemius implied,
many of the names of what are today unknown groups reported in earlier documents may have referred to various subgroups of the modern surviving groups. The magnitude of the discrepancy in numbers of aboriginal Honduran groups found in the early reports compared to twentieth century research is illustrated in Healy’s review of archaeological research in Honduras. He stated that “we can identify seven major native groups which were present in Honduras at the time of the conquest and their approximate spatial distribution (Healy 1984: 115).” He based his assertion upon the works of Stone, Johnson, Mason, and Campbell. Healy summed up the difficulties in achieving an accurate understanding of the distribution of native peoples around the time of Contact:

Like the rest of Central America, sixteenth-century Honduras had an exceedingly complex ethnographic and linguistic composition. Our understanding of this diversity has been hindered by the scarcity of ethnographic studies and by the rapid rate of extinction of many aboriginal groups. The ethnohistoric record is also very uneven and generally inadequate. Stone (1941, 1948, 1957, 1966b), in several major surveys, has identified the important early chroniclers and discussed the types of ethnohistoric information which are available for Honduras and the balance of Central America. Over the years there have been some attempts at the correlation of ethnographic and archaeological data (see Stone 1941, 1942a, 1942b, 1969b). More research along this line needs to be conducted. (Healy 1984: 115)

To obtain an idea of the extent and location of the Pech territory at Contact, we must concern ourselves with scholarly interpretations of two types. The first type is that of a positive interpretation, that is, works that indicate where the Pech were in 1502. A negative interpretation, the second type that can shed light on pre-Columbian Pech region, will indicate where the Pech were not, or conversely, works of this type will indicate where a neighboring group was located and therefore, it is assumed, from where the Pech were excluded. Consideration of the various interpretations of possible Pech
pre-Columbian territory in combination with the suggested pre-Columbian territories of their neighbors at the time will give us a more complete picture of the Pech culture region possibilities around the beginning of the sixteenth century.

Several categories of data are utilized by ethnohistorians and others attempting to delimit pre-Contact cultural regions. These include archaeological and linguistic evidence, historical documentation, and surviving evidence in the modern landscape. While archaeologists and linguists rely primarily upon the data specific to their specialized fields in reconstructing past conditions, ethnohistorians, who usually come out of the fields of anthropology, history, and geography, tend to bring a broader range of data to bear on the effort to delimit past regions. While the “hard” data provided by archaeological investigations seems to carry the most weight in efforts at reconstructing past regions and conditions, the more diverse sources of evidence utilized by the ethnohistorian provide, at least, corroborating evidence that helps to confirm or to call into question the interpretations of the archaeologist. In regions where little archaeological investigation has been conducted, as is the case in eastern Honduras, ethnohistoric reconstruction can provide the first and best estimation of past conditions. In addition to utilizing the results of archaeological and linguistic investigations, ethnohistorians are likely to incorporate the evidence provided by historical documents as well as to engage in “upstreaming” from more recent ethnographic studies, that is, to make speculative projections about past ethnographic conditions based upon evidence from the present or recent past under the assumption that present conditions are
descended from, and directly related to, past conditions (Krech 1991: 348; Carmack 1972: 238; Cline 1972a).

In addition to evidence from the modern ethnographic situation, ethnohistorians, particularly those coming out of the field of geography, may also consider evidence from the modern landscape as an aid in delimiting past regions. Davidson has speculated that many of Honduras' past native cultural borders may have followed, in part, natural features of the physical landscape such as mountains, breaks in topography, rivers or major rapids that hindered river transportation (1991: 207, 212). But landscape evidence is not limited to the physical. The human landscape also provides evidence, including archaeological sites and artifacts. Historic artifacts also tell the story of past occupants of a place (Kniffen 1965).

One of the most important categories of historic evidence from the modern human landscape for ethnohistorians and ethnogeographers is found in the place names of a region. The names given to places and features by the inhabitants of an area often provide clues to the past nature of the place, even if it no longer bears the characteristics indicated by the name. And the language spoken by the namers of a place, reflected in the place name itself, is likewise a record of past inhabitants of that place, even if they are no longer found living there.

Ethnogeographers can combine the physical and human landscape evidence to increase the probability of accuracy in their interpretations of past culture regions. Davidson discovered that the Pech and Sumu place name suffixes along the Río Wampú indicate that different aboriginal groups named that river's tributaries upstream and
downstream from the "canoe line" where a large rapid blocks watercraft transportation, requiring a portage around it for cargo laden travelers (Davidson 1991:212).

**Delimitations of the Pre-Columbian Pech Culture Region: Where They Were**

Because we are dealing with a people that left no written record of the pre-Contact and Colonial periods, a delimitation of the pre-Columbian Pech culture region necessarily depends upon the interpretation of evidence provided by archaeology, historical documents provided by Spanish explorers and colonialists, and ethnogeographical techniques. Delimitation of the pre-Columbian culture region of the Pech, who are called the Paya in historical documents, is further complicated by the lack of direct references to the Pech in the early colonial documents as well as by the confusion on the part of writers of the various different native groups inhabiting Honduras.

Conzemius found no specific mention of the Payas in the documents of the sixteenth century Spanish chroniclers and conquistadores (1928:22) and stated that during that period they were referred to only "juntos con las otras tribus de la Mosquitia bajo las designaciones Chontales y Popolucas dos términos mejicanos para designar las tribus incultas en diferentes partes de México y Centroamérica" (1928:11). Conzemius also found confusion in seventeenth and eighteenth century reports stemming from the indiscriminate use of the term jicaque to refer to the various groups of la Mosquitia, among which he identifies as the Paya, Lenca, and Jicaque (or Tol) (1928:11-12).
Doris Stone also noted that several labels were often found in use in the literature to refer to diverse indigenous groups of this area in her survey of native languages in lower Central America.

Beginning with Nicaragua and extending into and beyond Honduras are general terms which include non-northern or non-Mexican tongues, the most common being Carib and Chontal. . . . Another similar name belonging more to Honduras is Jicaque (Xicaque). . . .

There are also three over-all designations in the early documents: Ulva, Taguaca, and Lenca. Each of these terms is applicable to diverse groups which were dialectically and ethnologically bound together. (Stone 1966: 212)

Stone discussed in greater detail the wide application of *jicaque* to the various Honduran groups in an earlier article. She reported that *Jicaque* is a word of Mexican origin meaning “former inhabitants” (1942: 376). It was originally applied by the Spaniards’ Mexican interpreters to the native inhabitants of Honduras and “in the last years of the Conquest, and during the Colonial period, the word “Jicaque” appears to have been a “termo provincial” to cover all non-Christian Indians” (1942: 376). The early widespread use of the term presented problems for Stone’s project of delimiting the early region inhabited by the ancestors of the specific group that modern linguists identify as speakers of the *jicaque* language. This group, known today as the Tol, Tolupan, or Terrapene, was only one of the various groups to which the term *jicaque* was applied and Stone therefore used archaeological findings in addition to the ethnohistorical sources to help differentiate the early region of the *jicaque* speakers from those of the other groups that were so often lumped together under that classification in historical documents. Similar difficulties arise for those attempting to delimit an early Pech region.
Anne Chapman also summarized the early indiscriminate use of the term:

As far back as the late sixteenth century, “Xicaque” . . . applied to almost any semi-sedentary group in Honduras and Nicaragua who were part-time cultivators relying heavily on hunting and fishing. They were mobile and fearless people. The term referred to the ancestors of the Tolupans, Payas, Matagalpas, Sumus, Misquitos, and others in eastern Honduras and neighboring Nicaragua. (Chapman 1992:13).

In her 1958 study of the indigenous groups of eastern Honduras and Nicaragua, Chapman considered at greater length the confusing use of *jicaque* in historical documents. She noted that

the Spaniards employed it with reference to the tribes of central and eastern Honduras and western Nicaragua. Throughout the seventeenth and eighteenth centuries, the Xicaques were the Indians who fought back the incursions (*entradass*) made into their territory, robbed the Spanish settlements, fled the Spanish attempts at retaliation, resisted efforts to force them to settle in villages (*reducirlos*), and rejected the advances of missionaries. The name “Xicaque” became synonymous with such terms as pagan, infidel, heathen, barbarian, crude person, elusive one, forest or jungle Indian. In effect, the Xicaques were, by definition, the Indians who resisted physical and spiritual conquest. Even today the term has a derogatory connotation in the language of the ladinos or mestizos of Honduras and Guatemala. (Chapman 1958:40-41)

Chapman then distinguished between the generic use of the term as described above and the more modern usage which applies specifically to the Tol, or jicaque speakers, and proceeded to recount more of the history of the confusing usage of the term:

As *Xicoaque* the term first appears in the available literature in 1598 in a letter written by Alonso Criado de Castilla, who describes them as “very wild and great idolaters.” It was used throughout the Colonial period to refer to tribes which have since been identified as the Lenca, Sumu, Matagalpa, and Paya, as well as the Jicaque proper. It was mostly employed by the Franciscan missionaries who labored in this area of Honduras and Nicaragua. By the middle of the eighteenth century, the term was applied in a specific sense by the missionaries and governmental authorities of *Propaganda Fide* to the Indians inhabiting the *Subdelagación de Yoro*, which included the territory east of the Ulúa River, north
of the Sulaco River and west of Trujillo or the Aguán River. However it continued to be used in its generic sense. (Chapman 1958: 41-42)

Davidson likewise highlighted the problem of the indiscriminate application of the label *jicaque* to various native groups in his own research on the early Tol region. He agreed with Stone and others that term is of Mexican origin and added that it “generalmente implicaba un significado derogatorio para la gente rústica local” (1985: 59). Davidson reported that the term is still used in this sense in Honduras today, but that by around AD 1700 the writers of historical documents had begun to apply it more specifically to the yet unconquered Indians of north and central Honduras. However, while a better differentiation between the various indigenous groups was being made in the reports, confusion between the groups occasionally persisted (1985: 61).

Chapman also recognized the confusion created by the misidentification of specific native groups and the resulting misapplication of specific group names in the historical documents once the effort to distinguish between the various peoples began to be made. Concerning the identification of the Paya in documents, she noted that

In contrast to the term “Xicaque,” the name “Paya” has referred quite consistently since the early seventeenth century to peoples recognized as such today. However, during the sixteenth century they were often called by the generic terms Xicaque or Chontal or confused with the Lencas; the Toacas or Towkas of the Patuca River, and the Secos of the Black River were Payas. (Chapman 1958: 52)

Her passage also unwittingly shows that confusion between the various groups can persist into even more recent times, for the Tawahka are now known to be a Sumu people, rather than Pech.
Conzemius reported no mention of the name Paya or its variants in the Spanish writings during their first century in Honduras. Both he and Chapman indicate that the name Paya is found in seventeenth century documents, albeit sometimes the group is misidentified and the name misapplied. Stone and Davidson, however, have each proposed that the earliest indication of Pech presence dates back to Columbus’ visit to Honduras and is found in the writings of Mártir. Mártir’s account describes the discovery by Columbus of two native provinces on the mainland coast called Tâia and Máia. Stone argued that Taia could have been a printer’s mistranscription of Paia from the original manuscript, given the possibility of “a strong resemblance between handwritten I, T and P” and the fact that “both Taia and Taia occur in the 1574 edition” of Mártir’s account (1941:9). Paia, she believed, would have been the province of the people who became known as the Paya and, today, as the Pech. Davidson also believed that the word Taia provides the earliest indication of Paya occupation of the Honduran mainland. He suggested that the word was not a self-descriptive label, however, but a Pech word meaning “mine” (1991:209). It therefore represented a Pech place name for the lands then occupied by the Pech in contrast to the lands, called Maia, that were occupied by other, non-Pech, peoples.

Although they are believed to have occupied the interior of eastern Honduras to the south of present day Trujillo, the exact location and extent of the Pech territory prior to Columbus’ arrival remains a matter of debate. Several scholars have worked to shed light on the extent of this region and a comparison of their results can be seen in Figure 1. Although each presents a somewhat different interpretation of the Pech region, all
Figure 1. Estimates of the extent of the early Pech region.
have delimited a territory much larger than that of the modern Pech and each pre-
Columbian regional definition includes the core of the remaining Pech territory of today.
As will be seen, however, few researchers have attempted to define a Pech region
exclusively or comprehensively. Often they have relied primarily upon a single class of
data, such as linguistic or archaeological data, and frequently the culture regions of
eastern Honduras amount to guesses or approximations arrived at by dividing the
territory among the groups believed to have lived there at the time with little basis in
evidence for the exact placement of the cultural borders.

The ethnographer Eduard Conzemius conducted the earliest detailed research on
the Pech Indians. While other travelers had previously visited the area and had
occasionally included accounts of the Pech in their reports, Conzemius' work remains
the most complete ethnography of the Pech to date. Conzemius worked throughout the
Honduran Mosquitia from 1917 to 1921 and during which time most of his contact with
the Pech occurred from 1919 to 1921. The study was published in 1927 and 1928.

In his ethnographic study of the Paya, Conzemius described their early region
based upon his reading of the historical documentation and the works of other scholars
relating to the region, such as those of Lehmann. He believed that throughout the early
colonial period until the mid-1600s the Pech occupied a territory covering the lands
between the Aguán and Pataca rivers from about 86°W longitude to the coast and which
also included the "Caratasca region littoral as far as Cabo Gracias a Dios at the
Nicaraguan border" (1928: 1-3). He did not believe that the northeastern portion of the
pre-Columbian Pech region extended beyond the Aguán river (1928: 1, 23).
The publication of *The Maya and Their Neighbors* in 1940 provided the next important delimitation of the Pech region. There, Frederick Johnson published “The Linguistic Map of Mexico and Central America” in an effort to show the Contact and early Colonial period distribution of native peoples. He specified that the map was intended to show native groups “in the regions where they were first discovered. As far as possible this map represents the linguistic distribution during the latter part of the sixteenth century” (1940: 90). Johnson based the language classes shown on his map upon the work of J. Alden Mason, whose linguistic classification was presented in the article, “The Native Languages of Middle America,” in the same volume. In their respective works, Johnson and Mason attempted to compile, organize and present the linguistic relationships, classifications, and early geographic distributions of the indigenous languages of Mexico and Central America as then understood. Subsequent research has amended the work of both men. In addition to providing the most up-to-date information concerning early Middle American language distributions, the cartographic representation of the new, comprehensive language classification system was a major purpose for the creation of Johnson’s map.

In addition to following Mason’s linguistic classification system, Johnson based the language distributions on his map upon several prior linguistic maps, especially those by Thomas and Swanton (1911) and Lehmann (1920). These earlier proposed distributions were amended according to evidence from more localized linguistic maps and studies and, occasionally, from Johnson’s own examination of historical documents (1940: 89, 83-94). Johnson discussed the difficulties in arbitrating between the
sometimes conflicting delimitations of the various maps upon which he based his work as well as the deficiencies of many historical documents for use in linguistic region reconstruction. He also noted, however, that “in spite of their unsatisfactory character, the documents are a never-ending source of information” (1940: 89). He recognized, therefore, the value of these documents for what is today known as ethnohistoric research, but was unable to base such a large scale project primarily upon their reading and interpretation.

Because Johnson’s 1940 map was primarily a compilation and updating of prior linguistic maps using more localized and more recent studies, its accuracy necessarily varied with the quality of historical documentation available for, and the amount of scholarly research that had been conducted in, an area. He explained that “when a map is drawn which covers a large area or deals with a wide variety of languages it is obvious that some areas will be shown more accurately and in more detail than others. Some areas have been investigated more fully, and the early records of the people in one region are more complete or better known than those of others” (1940: 88). As Johnson often makes clear in his discussion of the placement of the regional boundaries for various specific language groups of eastern Honduras and Nicaragua, both of these limitations effect the accuracy and “trustworthiness” of his delimitations on this part of the map. Highlighting the lack of prior research and the subsequently tentative nature of his delimitations in eastern Honduras, Johnson noted that

There is even more need at present for a comprehensive study of the languages spoken east of the Ulua River than for those found to the west. It is obvious that such a study will provide an outline and supply numerous details which will aid in
understanding the results of the contact between Central American and South American peoples. The consequences of such an understanding will penetrate deeply into the fog which surrounds much of the present knowledge of Central American cultures. It is hoped that the few innovations and implications which are tentatively and timorously made here will indicate the possibilities of intellectual aggrandizement, if not more tangible remuneration, as a reward for an attack upon this almost despised section. (Johnson 1940:94-95)

In spite of these recognized limitations, however, Johnson’s map of this area represents his best effort at the interpretation of the data then available regarding the Pech region and its neighbors.

Concerning his delimitation of where the Pech were during the first century of Spanish occupation of Honduras, Johnson’s map shows a Paya Language region similar in many respects to the region proposed by Conzemius, with the exception of the Caratasca littoral, which he excludes from the Paya region and includes as a portion of the Mosquitoan language region. Of course, subsequent research suggests that Paya should not be considered as an independent or unaffiliated language, as it was identified by Johnson and Mason, but rather as a Chibchan-related language (Chapman 1992:14; Campbell 1979:942; Healy 1984:116). We also now know that Miskito dialects could not have been spoken along the eastern coasts of Honduras and Nicaragua at the time as shown on the map since the Miskito had yet to come into being as an identifiable ethnic group. These facts do not necessarily argue against Johnson’s Paya region delimitation in and of themselves, however, because the recategorization of Paya relates to its linguistic relationships but not necessarily to its geographic distribution and the territory delimited as Mosquitoan may be assumed to have been instead part of the Suman language region, as the Sumu are believed to have provided the Native American component of the later
Miskito culture. Johnson himself admitted that the Miskito and Sumu regions would not be delimited separately on a map of sixteenth century language regions, should the Miskito be proven to have origins among the Sumu (1940: 111). At the time, however, he did not accept such a proposition.

Of far greater concern regarding the potential accuracy of the territory delimited for the Pech on Johnson’s map are the lack of historical data and conclusive research available at the time to inform his placement of the Paya language boundaries. Describing the distribution of the Payan Language on his map Johnson wrote

The descriptions of the locations of the Paya are very confusing indeed. The only one which seems certain is the western boundary on the north coast, the Aguán River, and Conzemius 1928 adds that they did not extend beyond 86 degrees east [sic] of Greenwich. Nothing concerning the southern boundary can be found in the modern literature, and so the boundary on the present map has been arbitrarily drawn simply for convenience. The various authorities contradict themselves and each other in their attempts to locate the eastern boundary. Practically every one states that the Paya extended as far as Cabo Gracias a Dios or the Wanks River, but all maps draw the boundary at the Patuca River. Since the Mam division of the Mosquito are, upon reasonably good authority reported as living in the region around the Laguna Caratasca, the western boundary of the Paya is left at the Patuka on the present map. (Johnson 1940: 113-114)

Johnson, therefore, appears to base his Pech region delimitation upon the description provided by Conzemius and, as indicated in his notes, upon the maps of Thomas and Swanton, Lehmann, and Rivet. He found substantial agreement upon the Río Aguán as a northeastern boundary for the Pech region. To the southeast, however, the situation was more confused. Johnson placed the southeastern boundary along the Río Patuca as described by Conzemius and as shown on the various linguistic maps that he consulted, although the map authors apparently evidenced uncertainty regarding the fluvial
geography of eastern Honduras. On the eastern edge of the Pech region, Johnson continues the boundary along the Patuca to the coast rather than including the Caratasca area, as Conzemius had described. Johnson’s southern boundary for the Pech region, at the intersection of the Pech, Sumu, and Lenca regions, is uncertain and admittedly arbitrary.

Chapman’s 1958 study on the Conquest era culture of the Caribbean tribes of eastern Honduras and Nicaragua, that is, the culture groups of northern lower Central America, adds little new to the previously reviewed delimitations of the early Pech region. It is important to include her work here, however, both because it is one the few efforts that have been made to describe the region of Pech occupation around the time of Contact and because her extensive review of the historical documentation and research record both summarized the apparent “concensus of opinion” at the time and led her to accept that general concensus rather than to challenge or modify the region which it presented. She reported that

Except concerning the Bay Islands and the adjacent mainland, there is a concensus [sic] of opinion about the area which the Paya occupied at the time of the Conquest, that is, the territory east of the mouth of the Aguán River to Caratasca Lagoon or beyond near the mouth of the Segovia, the present day Honduran-Nicaraguan border. There [sic] western neighbors were the Jicaque. They shared the inland Olancho region with the Lenca and the Sumu. (Chapman 1958: 53)

Chapman’s regional description tracks closely that of Conzemius, whom she cites here as a source, extending along the coast from the Aguán to the area of Caratasca, and possibly as far as the Segovia. The Pech region is also described as extending inland an unspecified distance to the borders of the Jicaque, Lenca, and Sumu territories.
Elsewhere, however, Chapman provided a slightly more detailed description of the southern portion of the inland boundaries of the Pech region when she noted that the Conquest era territory of the Jicaque and Paya was “bounded on the north by the Ulua River, on the east by the Caratasca Lagoon or the Segovia River, and on the south by the Guayape and Sulaco Rivers” (1958:36). The Río Guayape, and presumably its continuation as the Río Patuca as far as the area of Caratasca, can therefore serve as an approximation of Chapman’s southern Pech region boundary. This assumption is supported by her statement that “the Toacas or Towkas of the Patuca River... were Payas” (1958:52). This, of course, agrees with the placement of the southern border by both Conzemius and Johnson. The nucleus of Chapman’s region also shows strong agreement with that of Johnson as well as Conzemius, but here again we see reference to possible early Pech occupation of the Caratasca region, which Conzemius suggested but which was rejected by Johnson. This is not surprising, given that Conzemius appears to be her primary source for the regional boundaries. Chapman seems to recognize the conflict by qualifying her description of this part of the region, which one could read as extending “up to Caratasca Lagoon or perhaps beyond near the mouth of the Segovia.” Such a reading would place the southeastern boundary of her Pech region at the northwestern edge of Caratasca Lagoon, which would expand the region only slightly beyond Johnson’s Patuca River border. She also reflected the conflicting opinions concerning this zone when she later wrote that

It is quite certain that the Indian ancestors of the Miskito inhabited the area of the mouth of the Segovia River in pre-Hispanic times. Just how far they extended along the coast or inland is not known. There is no information at all referential to
the inhabitants of the Caratasca Lagoon west of the Segovia. It may have been uninhabited or inhabited by either these people or the Paya. (Chapman 1958: 55)

Chapman thereby avoids unequivocally claiming the lands surrounding Caratasca for the pre-Columbian Pech but she also doesn’t entirely discount the idea.

Doris Stone produced several articles that considered the pre-Columbian and Conquest era territory occupied by the Pech. She typically utilized both archaeological data and historical documents in her attempts to reconstruct the early region. Although the details of her boundary delimitation can be seen to change over time, the nucleus of her Pech region seems to remain fairly constant (cf. Stone 1958: 671 and Stone 1966: Fig. 1).

Stone first provided a general description of the pre-Columbian Pech region in a paper she presented in 1939 that proposed a connection between Honduran artifacts which she identified as Payan and artifacts found in areas farther to the south as a means of providing archaeological evidence to support linguists’ theories of Pech origins in South America. She believed that the eastern Honduran artifacts were Payan because of their similarities with those found in the Agalta Valley, which she considered to be “Paya country” based upon the accounts of Vasquez and Goicoechea (1942: 227). In the paper she noted that “the Paya inhabited the hills and savannas around the upper tributaries of the coastal rivers. And here—from the vicinity of the Patuca westward through the Aguán, including the Bay Islands, and reaching inland to the valley of Olancho—is Paya country, where artifacts associated with Paya culture have been found” (1942: 227).
Stone's most detailed work involving the Pech region was her "Archaeology of the North Coast of Honduras," which was published by the Peabody Museum of Archaeology and Ethnology in 1941. A major portion of this work was given to the discussion of the archaeological remains in the region she identified as Paya. Her initial determination of the zone as Pech, of course, was based upon ethnohistorical interpretation and, thereafter, she traced the archaeological similarities of sites and artifacts from that region. She included a map of the location of archaeological sites in her publication but did not present a cartographic delimitation of a pre-Columbian Pech region. Her most succinct description of the early distribution of the Pech supported by ethnohistorical data stated that

From the available source material, we can place the Paya in the valley of the Agalta north of Olancho, on a river called Xarua, or Uagua; and on the coast, mostly from the Aguán River, slanting southeastward to the upper reaches of the Patuca, as well as on the Bay Islands because Juan de Vaena, when he made his entrada into the Xarua region, took as interpreter an Indian from Roatán or Guanaja Island, and because the archaeology of the mainland is similar to that of the islands. (Stone 1941:10)

Her site map does delimit a region identified as Teuzgalpa that somewhat matches this Pech region description discerned from historical documentation. It is substantially different from her later, 1966, Pech region delimitation, however, which better reflects the totality of her conclusions, based additionally upon archaeological reports, in the 1941 report by incorporating also the majority of the drainage basin of the Río Plátano and most of the territory northwest of the Río Patuca, as will be seen below. Stone also presented her conclusions regarding the early distribution of the Pech based upon the
historical evidence referred to above and her review of archaeological investigations in eastern Honduras:

Linguistically, the Paya occupied the region from the Rio Negro through the Aguán and perhaps the Bay Islands. There is also historical evidence that the lower regions of the Guayambre and the valleys of Agalta and Gualaco were Paya, and that the coastal area, at least, was called Taia, or Iaía (Paia). The archaeology of the above-mentioned sections the writer calls Paya. We believe, furthermore, that the people whose archaeological remains we have examined in this region are the same as those whose remains Strong excavated on the Bay Islands. There is also a similarity with some of the artifacts from Olancho and from the Rio Negro-Aguán sections. Besides this, from a close study of these artifacts, it seems as if the Paya were related to a people of the Costa Rican highlands, that is, they had a decided Güetar-type in their ceramics. (Stone 1941: 93)

Stone’s most recent delimitation of the early Pech region is shown on her map of “Indigenous Languages of Lower Central America at the Time of Spanish Conquest” which is part of her “Synthesis of Lower Central American Ethnohistory” chapter in volume 4 of the Handbook of Middle American Indians (1966: Fig. 1). The map, unfortunately, reflects the confused use of terminology discussed above as Stone includes, in addition to the Paya and Lenca regions proper, a large region to the southeast of the Paya that is identified as “Paya-Taguacas (Lenca).” She also assigned the entire Caribbean coast from Río Sico to Río San Juan to the Mosquitos even though she noted in the text that the term “Misquito” was “not seen before the 18th century” (1966: 213). Her Paya region proper, nevertheless, corresponds fairly well with the others discussed here. She described the extent of the Pech region when she noted that “Paya was spoken from Trujillo to the Pataca River and inland as far as the valley of Olancho where Lenca predominated. It also extended from the northern border of Jamastran northward into the forest land of the upper Pataca” (1966: 214). The Paya
region delimited on the map, however, deviates slightly from the description as written. The map shows the Paya language region extending along the coast only from Trujillo to the mouth of the Río Negro. This is apparently derived from her observations that Columbus’ Bay Island interpreter “was useful on the mainland near the Aguán River” (1966: 214) and that during the eighteenth century “Misquitos appeared to have occupied the coast from Black River to the San Juan basin” (1966: 213). East and south of the Río Negro the Caribbean edge is shown as part of the Mosquito region. Inland from the Mosquito, however, the Paya region does indeed extend to the Río Patuca. Stone’s map also includes the entire Guayape river downstream from the confluence of the Río Jalán within the Paya region. Thus the Olancho valley itself is delimited as part of the Paya region, rather than the Lenca region as is might be inferred from the text.

Like the delimitations of Conzemius and Johnson, the bulk of Stone’s Paya language region lies between the Aguán and Patuca Rivers. In contrast, however, it extends north of the Aguán to include the lands surrounding Trujillo Bay and it excludes the near-coast lands between the Ríos Sico and Patuca. Her delimitation also extends slightly farther inland to the west than the 86°W limit observed by Conzemius and Johnson. This work, like those of Johnson and Chapman, represents a summarization and interpretation of the previous research, much of it relating to central and eastern Honduras being Stone’s own, to date. Comparison with the prior delimitations shows that, with regards to the Pech region, few adjustments have been made.

Paul F. Healy (1984) reviewed the current status of archaeological and related research on Honduras for the advanced seminar in 1980 which led to the publication of
the volume, *The Archaeology of Lower Central America*. In his chapter, "The Archaeology of Honduras," he noted the complex geography and Contact era ethnography of the country, as well as the inadequate and preliminary status of archaeological investigation over much of it, and stated that "because of this complexity, few archaeologists have attempted to synthesize the archaeology of Honduras" (1984: 113). These conditions led him to conclude that "Honduras archaeology is operating in the Classificatory-Historical period of development, 20 or more years behind work being done elsewhere in the Americas" (1984: 160). The aim of his work was, therefore, to summarize Honduran archaeological research to date and, from that research, to present an archaeological chronology for those parts of the country that had been sufficiently studied to support it. He stated that his "paper reviews the pertinent information in a spatial/temporal format, summarizes some of the most recent data and interpretations, identifies the most glaring deficiencies, and suggests some possible future directions for Honduran archaeology" (1984: 113).

For his review, Healy divided Honduras into six archaeological regions which were "defined primarily in terms of previous archaeological work, not of any particular linguistic or ethnographic boundaries" (1984: 117) and which, because of the lack of available research, did not encompass the entire state. He specified that "vast areas of eastern, central, and northern Honduras must, by necessity, remain outside our review" (1984: 117). Unfortunately for our purposes, much of the area that has been proposed as comprising the early regions of the Pech and their neighbors is part of that vast area for which Healy found little or no previous archaeological research. He noted
specifically that the La Mosquitia Caribbean lowland “is one of the least known areas of all Central America and is not included in this paper” (1984:115). Although his regions were not based upon native group distributions, only one of the six, the Northeast Region, covers territory that is believed to have been inhabited by the Pech. Healy’s description of the Northeast Region shows the extent to which the early Pech region had been excluded from investigation.

This archaeological region includes the Departments of Colon and Islas de la Bahia. Future investigation will probably reveal enough similarities to expand the region to include much of the interior Department of Olancho, the easternmost Department of Gracias a Dios, and perhaps the eastern edge of the Department of Atlantida. However, recent work has focused almost exclusively on the larger Bay Islands and the Aguán Valley of Colon. (Healy 1984:120)

Note that Healy is here proposing that future research will simply expand the region of archaeological investigation and not, necessarily, expand any proposed Pech region. His regionalization is presented here to illustrate the lack of available archaeological research to shed light on the pre-Columbian distributions throughout much of the territory believed to have been occupied by the Pech and their neighbors.

In terms of the peoples whose remains are studied by the archaeologists, from the works of Stone, Johnson, Mason, and Campbell, Healy identified “seven major linguistic groups which were present in Honduras at the time of the conquest and their approximate spatial distribution” (1984:115). These were the Maya, Jicaque, Lenca, Pipil, Mangue, Paya, and Ulva. Although they are included in the works of Stone, Johnson, and Mason, Healy fails to mention the Sumu-related peoples that are believed to have lived to the south and east of the Pech. It is unclear whether this is because he
does not consider them a major linguistic group or because their proposed territories lie completely outside of his reviewed archaeological regions.

Although it is not the primary purpose of his paper, Healy succinctly summarized the current beliefs concerning the early distribution of each group. Of the Paya he noted that “precise distribution of this group remains unclear but apparently it was centered along the coast and in northeast Honduras, including the Departments of Colon, Gracias a Dios, and the Bay Islands of Honduras” (1984:116). His summary completely excluded the Department of Olancho, portions of which are included within each of the other estimations of the early Pech region as well as the remaining, modern Pech region. Beyond this statement, however, Healy provides little information specifically regarding the early Pech distribution. He saw a need for more research clarifying “the correlation of ethnographic and archaeological data” (1984:115) within Honduras and in his discussion of the archaeological investigations conducted within the Northeast Region he does not specifically attribute the sites and artifacts studied to the Pech.

In apparent response to one of the themes of the seminar, which was concerned with the contacts and relations between Mesoamerica and lower Central America, however, he stated that “northeast Honduras by A.D. 300 appears to have developed along quite local, and not very Mesoamerican, lines. This trend of deviation from the Mesoamerican cultural pattern continues throughout the balance of the pre-Columbian era” (1984:137). Later in the chronology, relating to the seminar-established Period V, which lasted from A.D. 500-1000, he again noted that “in northeast Honduras, ceramics, settlement patterns, and burial customs were beginning to take on very non-
Mesoamerican characteristics" (1984: 148). The final chronologic period, Period VI, from A.D. 1000-1550, is divided in Healy’s Northeast region into “the Early and Late Cocal phases (A.D. 1000-1400 and A.D. 1400-1530 respectively)” (1984: 152). Healy believed that “the Northeast region was becoming more receptive by Period VI to contacts and influences from both its southern and northern neighbors. . . . Although the basic regional culture in Period VI may have been non-Mesoamerican in foundation, it was obviously in contact with the north” (1984: 156). These statements, while not arguing specifically for a pre-Columbian Pech occupation of the Northeast, indicate that Healy interpreted the culture history illustrated in the archaeological remains to be one of local, non-Mesoamerican origin.

Of the early Pech region delimitations reviewed thus far, then, those of Conzemius, Johnson, and Chapman show considerable similarity. Their similarities result, no doubt, from the various authors’ reliance upon the same data provided by the available historical documents and prior linguistic studies. Convergence among the three is also promoted, of course, by the fact that Conzemius’ work was an important source of information for Johnson and, likewise, Chapman cited both Conzemius and Johnson in her own work. Stone’s delimitation diverges slightly from the three prior regionalizations based in large part upon her own reading of the documents and her archaeological surveys in the northern part of the region. While Stone also relied in part upon Conzemius, she cites neither Johnson nor Chapman in her 1966 article but she does cite the work of Lehmann which was also one of Johnson’s primary sources. Healy doesn’t attempt a new delimitation based upon the available archaeological research but
simply presents a vague description based, apparently, upon the other proposed regionalizations and constrained by the limits of archaeological investigation.

The most recent work on the delimitation of an early Pech region is that of William V. Davidson. His 1991 chapter in volume 3 of the Smithsonian Institution's *Columbian Consequences* not only represents the most recent effort but is one of few major publications to deal exclusively with the Pech and their history since Conzemius and is the only work to devote a significant portion specifically to the delimitation of the territory occupied by the Pech prior to or during the first century of Spanish presence in the New World since Stone's 1941 and 1942 publications. Each of the other previous delimitations of an early Pech region were included as part of a larger effort to define the component linguistic, cultural, or archaeological regions of a larger area but that were not concerned primarily with the cultural history and historical region of the Pech.

Writing from the perspective of historical geography, Davidson brought a somewhat broader range of evidence to bear on the problem than is evident in the works coming from the anthropologically related fields. He considered "archeological, ethnohistorical, linguistic, toponymic, and geographical evidence" (1991: 207) in conjunction with his extensive field experience throughout the region to propose a new delimitation of the Pech region of the sixteenth century. While they were not explicitly a part of this paper, Davidson's previous works delimiting the early regions of neighboring indigenous groups, which will be considered below, certainly also contributed to his Pech region delimitation. His work was not a simple review and summary of prior delimitations like those of Healy and, with minor additional input, Johnson and
Chapman. Nor was it based upon one primary class of data, such as linguistics or archaeology, supplemented by the scant documentation, and its prior interpretation, relating to initial contact and subsequent *entradas* and missionary activity in the Pech region, as was the case, with the limited exception of the combined works of Stone, with each of the other delimitations here reviewed. Certainly the prior linguistic- and archaeology-based delimitations informed his work and provided a point of departure, but the results of his study indicated that he has reached a rather substantial reinterpretation of the available data. Writing at a later point in time, he, of course, had access to a greater amount of prior research as well as more recently recognized pertinent historical documentation than did the earlier writers. But a major distinction of this effort was the use of the varied combination of available data and its critical reinterpretation, rather than simple acceptance of previous interpretations, to estimate where the Pech were, as opposed to the larger scale projects whose Pech region delimitations often depended substantially on estimations of where they were not. Of course another author, writing contemporaneously but from a different perspective, has proposed a pre-Columbian situation in eastern Honduras that is somewhat at odds with that presented by Davidson but that work, too, illustrates the importance of, and possibilities in, fresh interpretations of the primary documents and basic data now available (Lara Pinto 1991).

Davidson’s fundamentally ethnogeographical approach, and its results, were evident when he explained that
If the limits of the “Pech” archeological region, the distribution of the sixteenth-century Indian settlements in the hinterlands of Trujillo and Olancho, the sites of modern Pech place names, and the eastern limits of Bay Island speech on the shore at 1502 are drawn on the same map, the composite that emerges probably comes close to defining the cultural region of the Pech in the 1500s. This territory included the Bay Islands and the north coast of Honduras between the Río Cangrejo (near La Ceiba) and Río Negro. To the interior, Pech occupied the valleys of the Aguán, Sico, Paulaya, and Plátano, as well as the Agalta Valley and the Olancho Valley at least until the confluence of the Río Tinto. The headwaters of the Wampú were probably utilized as well. (Davidson 1991:212)

This delimitation shifts the Pech region westward in comparison to the regional delimitations previously considered. It does not extend southeastward to the Patuca River but, instead, reaches farther westward up the Aguán Valley and beyond the Sierra de Agalta into western Olancho. The limits of this region are illustrated on Davidson’s map by the overlaying of his interpretations of the zones of archaeological sites that can be attributed to the Paya and of the late sixteenth century encomiendas that were within the jurisdictions of Trujillo and Olancho (1991:208). The complete region, then, is inferred from the union of these three zones which Davidson interprets as the domain of the pre-Columbian and sixteenth century Pech.

The identification of the archaeological and encomienda zones as Pech territory, however, is apparently a matter of ethnohistoric interpretation. Davidson qualified his interpretation of the distribution of Paya archaeological sites by noting that, while earlier archaeological reports considered the artifacts within this zone to be of Payan origin, the more recent reports covering similar artifacts in the area have been reluctant to associate them with a specific group. This undoubtedly relates to the more cautious approach of modern researchers stemming from the same concerns highlighted in Healy’s discussion.
of the preliminary state of archaeological investigation and the scarcity of studies on "the correlation of ethnographic and archaeological data" for the region (1984: 115).

Davidson also did not claim that the Indians of the Trujillo and Olancho encomiendas were specifically identified in the historical documents as Pech. Lacking a better established archaeological foundation and more specific, and accurate, historical references, then, it is the job of the ethnohistorical geographer to combine the available evidence from all sources to produce the most plausible reconstruction. Davidson first uses geographic, religious, linguistic and place name evidence provided by the earliest historical documentation, as well as the noted similarities in the archaeological remains, to propose that the Bay Islands and the adjacent mainland as far east as the mouth of the Río Negro was a unified cultural region at the beginning of the sixteenth century. In the linguistic evidence, in the form of words and place names recorded early within the region, he also found evidence to indicate that the inhabitants of this culture region at that time were indeed the Pech. This very early linguistic evidence provides earlier support for the so often agreed upon notion that at Contact the Pech inhabited this portion of northeastern Honduras. The prior claims, however, had apparently heretofore been based upon the documentary evidence of Pech presence in area from seventeenth century and later missionary activities there. Ethnographic upstreaming, or assuming that similar conditions held sway in the previous centuries, then permitted the assumption that the Pech must have also lived in the areas where they were encountered by the missionaries prior to the seventeenth century. Davidson's use of linguistic evidence from
the sixteenth century provides direct, if not one hundred percent certain, supporting evidence for the upstream assumptions.

The identification of a unified culture region and the partial establishment of its extent based upon archaeological similarities, historical geographical data, and the past and present distribution of related place names in turn provide support for the claim that the encomiendas of the last quarter of the sixteenth century, whose zones overlap significantly the unified region, would have been populated by the bearers of the culture of that same region. Cartographically, also, the encomienda regions seem to fit well with the Pech archaeological region delimited by Davidson. The western side of the archaeological region is comprised of three westward proruptions corresponding to the extent of archaeological reports relating to the Bay Islands, Aguán Valley and the mountains north of the Ríos Tinto and Guayape of the Olancho Valley. The lands between these westward extensions are archaeologically unknown. The Trujillo encomienda zone overlaps the two northern proruptions but also includes archaeologically unsurveyed lands north of the Aguán Valley to the coast. The Olancho encomienda zone overlaps the southern prorruption and includes unsurveyed lands lying mostly to the north and west of it. The unsurveyed lands which are added to the overall sixteenth century Pech region by the inclusion of the encomienda zones, therefore, lie mostly between the archaeological survey proruptions. If one were to delimit the early Pech region, via interpolation, by extending the entire western boundary of the Pech archaeological region to a line connecting the tips of the three proruptions, the only encomienda zone territory to be excluded by such a delimitation would be the
westernmost one-quarter of the Olancho zone and a smaller area in the southeast of the same zone. That this speculative exercise could be further justified by Davidson's own argument of the evidence rather than mere interpolation is indicated on his own map. There the Río Tayaco, which bears a name that Davidson argued is of Pech derivation (1991:209), is seen lying outside of any of his three Pech zones. Its situation is, however, precisely between both the central and southern archaeological prorruptions and the Trujillo and Olancho encomienda zones. The Río Tayaco, therefore, is a piece of toponymic evidence that could, especially considering the lack of contradictory evidence, be used to argue for the inclusion of archaeologically unsurveyed lands in the larger Pech region as well as to justify the bridging of the gaps between the westward prorruptions.

Delimitations of Neighboring Culture Regions: Where the Pech Were Not

Just as it is beyond the scope of this study to attempt a new delimitation of the Pech region at the time of Spanish contact, it is also well beyond its scope to attempt delimitations of the territories of their neighboring culture groups at that time. As mentioned above, however, the pre-Columbian distribution of non-Pech natives informs our understanding of the extent of the early Pech region. Lands occupied by other groups have typically been used by previous authors as an indication, with some occasional allowance for transition zones where groups may have overlapped, of where the Pech were not, and vice-versa. Under the assumption that the cultural territories were predominantly mutually exclusive, then, delimitation of the Pech' neighboring groups' regions plays a role in limiting the possibilities for early Pech occupation and control. Where their neighbors were, the Pech were not. We should, therefore, consider
several studies that have attempted to delimit the culture regions of the Pech' neighboring indigenous groups to evaluate how they contradict, or lend credence to, the previously considered definitions of the Pech region in the 1500s. Of course, the large scale mapping projects reviewed above often included delimitations of neighboring regions and therefore already illustrate individual author's attempts to define exclusive regions. These studies will be revisited briefly when salient statements are found and several studies of the specific neighboring groups will also be considered. These indigenous neighbors included the Tol (or Jicaque), the Lenca, the Matagalpa, the Sumu, and the Miskito.

For the most part, Pech communities today have no indigenous neighbors. The core of the Pech region is separated from other surviving native groups by ladino concentrations to the north, west, and south. To the east and southeast, the population concentration drops off considerably, but there are still many ladino landholdings lying along the major routes of travel, as well as large areas of uninhabited land, between the Pech core and areas of Sumu and Miskito population. The Pech of Baltiútok, on the Río Plátano in La Mosquitia, are an exception of course, since they share lands with the Miskito inhabitants of the area, but this group represents an exclave of Pech settlement and as such are themselves separated from the Pech core area by both zones of ladino settlement and large tracts of uninhabited lands in the interior of La Mosquitia.

Ignoring for a moment the ladino component of eastern Honduras’ population, the groups of native American heritage whose regions lie closest to that of the Pech today include the Tol in the Departments of Yoro and Francisco Morazán to the west,
the Tawahka Sumu along the Rios Pataua and Coco to the south and southeast, the Garifuna along the coast to the north, and the Miskito along the coast to the east. This modern arrangement of indigenous groups does not, however, reflect the pattern of relative distribution of native peoples that is believed to have existed in 1500. According to most reconstructions, the Tol and Sumu at Contact did occupy lands to the west and south of the Pech, respectively. The Garifuna and the Miskito, however, were not at that time occupying the coastal lands of Honduras where they are found today. In fact, they did not exist as identifiable culture groups until after the arrival of Europeans in the New World and therefore represent special cases in the ethnic geography of Central America.

The Garifuna and the Miskito are culture groups in which indigenous heritages and culture traits have survived, but they are not simply the direct descendants of single, or even of several closely related, pre-Columbian American culture groups. Both of these groups evolved as new and distinct entities from the biological and cultural mixing of American, African, and European elements following the Discovery and Conquest and therefore could not have been neighbors of, and competitors for land with, the pre-Contact Pech.

At Contact, then, the Garifuna and Miskito did not share culture region borders with the Pech. The native groups that are most commonly identified as having neighbored the Pech at that time included the Tol to the west, and the Sumu to the south and perhaps in the far east. The occupants of the lands to the southwest of the Pech region at Contact is less agreed upon, but the most commonly suggested groups to have
bordered the Pech region in this area are the Lenca and the Matagalpa. Enclaves of
Mesoamericans are also known to have existed within and bordering the Pech region.

The Tol (Tolupan) of the Northwest

Conzemius reported that toponymic evidence indicated that the early Pech region
bordered on the west with “las tribus lencas, sumus y matagalpas” no farther westward
than 86°W longitude (1928: 2). While it was likely that the pre-Columbian Pech shared
cultural borders with the Lenca and, perhaps, the Matagalpa to the southwest,
Conzemius did not mention the group that most authors present as bordering the Pech
on, at least, the northwestern portion of their region—the Jicaque, or, as they are known
today, the Tol.

The Jicaque language has been considered a part of the Hokan family since
Greenberg and Swadesh proposed the relationship in 1953 (Campbell 1979: 965).
Campbell believed that the Hokan grouping was problematic and in need of further study
to confirm any possible relationships between the languages commonly grouped as such
(1979: 918, 966). He did, however, find a linguistic relationship between Jicaque and
Tequistlatec, a Oaxacan Chontal language that “is generally considered Hokan” (1979:
965-966). Healy stated that the early Jicaque “distribution appears to cover much of
northern Honduras, ranging from the Ulua-Sula zone eastward to Colon. Campbell
(1976: 164-66) saw a coastal origin and spread but interior movement, to Yoro, after the

In spite of the often recognized potential for confusion on the part of
ethnohistorians resulting from the generic use of the label jicaque by early chroniclers to
refer to unconquered Indians in various parts of Honduras, there is considerable agreement among writers concerning the early distribution of the Jicaque speakers, the Tol. Since the work of Thomas and Swanton in 1911, researchers have consistently delimited their region along the north coast of Honduras from the area of the mouth of the Río Ulúa to the vicinity of Trujillo and extending inland into the mountains of the department of Yoro as the territory occupied by the Tol (Johnson 1940:113). Stone considered the origins of the term *jicaque* and surveyed its wide application to indigenous groups in Honduras but neglected to delimit a specific aboriginal region for the Tol in her discussion of the Jicaque (1941:10-12). In general terms, however, she stated that “it is interesting to note that the only people to whom the name Jicaque is applied today is a linguistic group in the Sula-Ulúa and Yoro region, a group whose language is distinct from the Lenca of the interior highlands” (1941:11). She chose the term “Sula-Jicaque” to designate these Jicaque speakers from groups to which the term was applied in the general sense (Stone 1941:12).

In contrast to most other writers, Stone (1941:15) believed that the north coast itself was inhabited by Maya at the time of Contact and that the Tol either shared the coastlands with them or were displaced toward the interior. Stone’s designation of the north coast as Maya, in spite of the admitted lack of evidence for the existence of Maya language there, apparently stems from her association of the aboriginal province of Maia recorded in accounts of Columbus’ fourth voyage with actual Mayan inhabitants. She supports her assertion with the archaeological findings of Maya-related artifacts in the
eastern extremes of this Maya region while ignoring the now-accepted trade connections between this area and Yucatan.

In 1942, Stone published an article, “A Delimitation of the Area and some of the Archaeology of the Sula-Jicaque Indians of Honduras,” that dealt more specifically with the aboriginal situation of the people now known as Tol and in which she suggested a more specific description of their early region. After again reviewing the problems associated with the generic use of the term *jicaque* and its occurrence in the historical documentation, Stone described several sites that she attributed to the early Sula-Jicaque and some of the artifacts collected at them. On the basis of her research she was then able to propose a delimitation of the former extent of Tol occupation:

From the combined historical, linguistic, and archaeological evidence, we can safely assign to the Sula-Jicaque the region west of Trujillo to Omoa, up the Ulua Valley to the vicinity of the present Santa Barbara, to the northeastern portion of the department of Tegucigalpa, westward to Sulaco. From here the Sulaco River itself might be used as a southern boundary for Sula-Jicaque people, even after it meets the Humuya River and until, as part of the Humuya, it enters the Sula Plain. (Stone 1942: 386)

Stone specifically excluded “the Comayagua Valley and . . . the region of Lake Yojoa” from the Sula-Jicaque region and concluded that, “in fact, the true country of the Sula-Jicaque appears to have been the valleys and mountain ranges of the greater portion of the northwestern coast” (1942: 386-387).

Stone’s description of the Sula-Jicaque region is geographically somewhat awkward and incomplete, proceeding, as it does, westward from Trujillo to Omoa and south to Santa Barbara, then skipping from Santa Barbara to northeastern Tegucigalpa Department (Francisco Morazán) to proceed westward again to the head of the Ulúa
Valley. She also failed to delimit the southeastern boundary of the Tol region between Trujillo and Montaña de la Flor in northern Francisco Morazán. The lack of a southeastern limit is especially pertinent to our discussion since that boundary would mark the border between the Pech and Tol culture regions. Stone’s delimitation nevertheless represents the earliest attempt to incorporate such a wide range of evidence to produce a specific delimitation of most of the early Tol region. As we shall see, the full extent of her delimitation is not always accepted by later authors, but the nucleus of the region in “the valleys and mountain ranges of the greater portion of the northwestern coast” (1942: 387) seems to accurately define the most commonly accepted heartland of the early Tol.

The anthropologist who has conducted the greatest amount of research on the culture and history of the Tol is Anne Chapman. In her 1958 dissertation, Chapman did not provide a detailed delimitation of an exclusive Tol region, but she did describe the area in general terms similar to, although slightly more restricted in the western part than, that indicated by Stone. She first described the area occupied by the combined Pech and Tol culture groups:

The area inhabited by the Jicaque and Paya at the time of the Conquest included central and eastern Honduras—the present-day departments of Atlantida and Yoro; western and central Olancho, and western Colón. The area is bounded on the north by the Ulua River, on the east by the Caratasca Lagoon or the Segovia River, and on the south by the Guayape and Sulaco Rivers. (Chapman 1958: 35-36).

Of course, the Rio Ulúa marked the western boundary, rather than the northern boundary, of the Tol as Chapman later specified when she stated explicitly that
A study of colonial documents raises a question concerning the western limits of the Jicaque territory in pre-Hispanic times. It is the impression of this writer than [sic] the Jicaques proper did not inhabit the area west of the Ulua River, but rather that this river formed their western border. (Chapman 1958: 42)

Chapman seems to have believed, in contrast to Stone, that the Tol, and not the Maya, occupied the coastal lands between the Ulúa and Trujillo but was in agreement with Stone that the Maya controlled the area around Trujillo itself:

With respect to the eastern limits of the Jicaque territory, there is no definitive evidence that this tribe occupied the site of Trujillo nor the Bay Islands in late aboriginal times. . . . the vicinity of Trujillo was probably occupied by Maya traders as well as by either the Jicaque or the Paya. (Chapman 1958: 45)

She saw, then, a region of Tol occupation along, and inland from, the north coast that bordered the Pech region to the east except for the area immediately around, and inland from, Trujillo, which was controlled by Mesoamericans (1958: 45). Except for this area near the coast, however, Chapman did not delimit explicitly the border between Pech and Tol lands. Her most succinct description of the Tol region provided only an approximate location for this border somewhere in western Olancho:

At the time of the Conquest, therefore, it appears that the Jicaque occupied a coastal and inland region bounded on the west by the Ulua River, on the east by the vicinity of Trujillo, and on the south by the Sulaco River. This area included all of the present-day departments of Atlántida and Yoro, and extended west and south into the neighboring departments of Olancho and Comayagua where the Jicaque were neighbors of the Payas and Lenca respectively. (Chapman 1958: 45)

In her later work devoted to the oral history of the Tol, Chapman described largely the same pre-Contact region for the Tol, but there she seemed to accept the modern border between the departments of Yoro and Olancho as the best approximation of the early cultural boundary between the Pech and Tol:
My analyses of the historical documents indicate that just prior to the Conquest and into the sixteenth century, the Jicaque (Tolupan) territory was limited on the west by the Ulua River, Gulf of Honduras, where the Jicaques were neighbors of different Mayan groups, including traders from Yucatan mentioned above. Their territory extended east along the Atlantic coast to the present town of Trujillo, site of the Pochteca port of trade, and inland to the Aguán River and the limits of the Department of Olancho, which was Paya territory. To the south the Jicaques reached the Sulaco River. In this area and in the upper Ulua Valley they were neighbors of the Lencas. (Chapman 1992: 15)

Figure 2 presents Chapman’s Pech and Tol regions using her latest opinion on the placement of the border between the two culture groups.

While he has not published a comprehensive delimitation of the early distribution of the indigenous groups of eastern Honduras, Davidson has studied the early Tol and Sumu culture regions in separate articles and, as might be expected, their boundaries roughly coincide with his proposed Pech region boundaries. Taken together, the boundaries delimited by Davidson for each of these early indigenous regions—the Tol, Tawahka Sumu, and Pech—present the best estimation of the early cultural borders between the Pech and their neighbors to date (Figure 3).

In his article, “Geografía de los toles de Honduras en el siglo XVIII,” Davidson mapped the distribution of the Honduran settlements of tribute paying Indians to show the areas of the country within, and outside of, Spanish control by the year 1700 (1985: 60). He delimited three areas, or indigenous enclaves, lying behind the eastern frontier of Spanish influence that still contained no tributary settlements by that time and that, therefore, remained outside of effective Spanish control. The largest unincorporated area stretches along the north coast from the Río Ulúa to just west of present location of Nueva Armenia and inland into northernmost Comayagua and Francisco Morazán.
Figure 2. Chapman's Pech and Tol regions.
Figure 3. Davidson's Delimitations of the Early Pech, Tol, and Tawahka Regions

Sources:
Davidson, 1985
Davidson, 1991
Davidson and Cruz S., 1988

Figure 3. Davidson's Tol, Pech, and Sumu regions.
departments. This area encompasses the nucleus of the pre-Columbian Tol regions proposed by both Stone and Chapman and is presented by Davidson as the remaining territory inhabited by unconquered Tol speakers in 1700 (1985: 59) (Figure 4).

Davidson's delimitation, of course, represents the situation some 175 years after the initiation of the Conquest in Honduras and the Tol region cannot, therefore, be considered as synonymous with the situation at Contact. It does, however, provide us with an indication, and probably a close approximation of the earlier situation. By 1700, the Spaniards had surrounded the Tol region but not conquered it. The only Spanish controlled Indian settlements within the region delimited for the Tol by Chapman lie along its eastern edge, indicating that the Spanish had encroached upon the Tol primarily from their eastern footholds from Trujillo to Olancho. Davidson does not identify the native origins of the inhabitants of the tribute paying settlements lying between the Tol and Pech areas, but if the reducciones along the eastern edge of the unconquered Tol region were indeed populated by Tol, we can assume that the pre-Contact Tol region had extended slightly eastward beyond the area delimited for 1700. A comparison of Davidson's Tol region at 1700 with his sixteenth-century Pech region also indicates that the Tol probably occupied lands, especially inland from the coast, somewhat to the east of the limits of unconquered territory in 1700.

Along the coast itself, Davidson's unconquered Tol region does not extend as far eastward as the vicinity of Trujillo, which both Chapman and Stone believed was the eastern limit of the Tol. We have already seen that Davidson believed that the Pech occupied the area just west of Trujillo, and his Pech region actually overlaps slightly with
Figure 4. Delimitations of the Early Tol region.
his unconquered Tol region. Neither of Stone’s works mentions any Tol archaeological remains in the eastern part of her Tol region.

Davidson’s report on the historical documents referring to the inhabitants of this area, and the attempts at their conversion and conquest during the colonial period, with which the bulk of the article deals, supports the contentions that the area was occupied by the Tol in early times. Historical references to the Tol, however, focus on the western portions of the Tol region and do not shed much light on the Tol-Pech borderland area.

The Lenca of the West

In the border areas south of the Tol and southwest of the Pech, writers have presented two native groups as possible pre-Columbian neighbors, the Lenca and the Matagalpa. For these groups, too, the early regional delimitations are still debated. It is generally agreed that the Lenca inhabited much of the highland area to the west of Comayagua and Tegucigalpa. In terms of regional relationship to the Pech, our concern is primarily one of how far eastward did the Lenca region extend. Some writers have placed the pre-Columbian Lenca in the Olancho valley while others see a later arrival of the Lenca in Olancho.

Johnson delimited a Lenca region that extended eastward to his southwestern border of the Pech region, near 86ºW longitude as first established by Conzemius. From the area of the Olancho Valley, the Lenca region’s southeastern border roughly followed the course of the Ríos Guayambre and Choluteca toward the Gulf of Fonseca until it met the Choluteca language region on the northern shore of the Gulf. Johnson’s Lenca
region also included most of El Salvador east of the Río Lempa and its western limit in central Honduras was a line connecting from the Lempa in El Salvador with Lake Yojoa. In the north, the Lenca bordered the Jicaque language region. As he explained, however, this eastern limit of the Lenca was determined primarily by his western limit of the Pech. In describing the distribution of the Lencan Family of the Macro Penutian Phylum of languages on his map Johnson stated:

That the Lenca inhabited a large part of Central Honduras, reaching to the Pacific at the Gulf of Fonseca, cannot be questioned. The actual boundaries are however difficult to determine. On the present map they have been determined by the limits of their neighbors. The western boundary is fairly well fixed by the eastern extension of the Maya. The other boundaries are simply arbitrary divisions between neighboring languages. (Johnson 1940: 110)

Much later, Newson, after her review of the evidence and prior research relating to Honduran native distributions around the time of Contact, was forced to make a similar judgement. She stated that “due to the fragmentary and unreliable nature of the evidence of the distribution of the Lenca, many of the boundaries shown on the map are defined by the boundaries of other cultural-linguistic groups” (1986: 24). Her map delimited a Lenca region that covers most southwestern Honduras from just west of the Ríos Ulúa and Jicatuyo in Santa Bárbara to a line connecting the Ríos Choluteca and Guayambre. From the Confluence of the Guayambre with the Río Guayape, the western border turns northward to intersect the Guayape and thence roughly follows the course of the Ríos Guayape, Sulaco, and Comayagua to the confluence of the latter with the Ulúa.
Campbell's and Healy's brief comments support the view that the Lenca controlled the heartland delimited by Johnson and Newson, if not their easternmost extensions. Campbell reported that recent linguistic work indicates that "the Lencan homeland was probably in central Honduras" (1979: 970). Healy noted that their "distribution is from eastern El Salvador and into southern central Honduras, such as the Departments of Lempira, Intibucá, La Paz, Comayagua, Francisco Morazán, and even Choluteca" (1984: 116).

Stone's 1966 map delimited a Lenca region that is at odds with most other descriptions. She delimited a region including lands south of the upper Río Patuca and extending southwestward into northwestern Nicaragua as Lenca territory but did not extend the Honduran portion westward beyond the headwaters of the Río Guayambre. She thereby failed to include the very lands that most people consider to be the heartland of the pre-Columbian Lenca. Presumably this was not because she intended to exclude the Lenca from central Honduras but because that portion of Honduras was simply outside of her consideration in this article. The area actually delimited here, however, is most commonly presented as Sumu, Ulva or Matagalpa territory by other authors.

In the 1966 text Stone noted that "there are also three over-all designations in the early documents: Ulva, Taguaca, and Lenca. Each of these terms is applicable to diverse groups which were dialectically and ethnologically bound together" (1966: 212). She did not differentiate between the various groups covered by each designation, however, and for the Lenca simply reported that
The Lenca were allied with the Taguacas in the provinces of Taguzgalpa and Tologalpa, which included from Castilla Point to Lake Nicaragua. Allusion to a Lenca tongue in Nicaragua was made in 1576 by Palacio who was “Oydor” of the Royal Audience of Guatemala arranged a contract with one of the first conquistadors to enter the province of Teguzgalpa. Although Palacio himself did not enter this region, he had access to men and reports now gone forever. (Stone 1966: 213)

Stone’s note 21 on page 213 claims support for Palacio’s identification of the Poton language in Nicaragua from “data furnished by later chroniclers, such as Vázquez, and the observations of linguists” as well as from Lehmann’s association of “certain place names in Nueva Segovia with the Lenca.” Her 1948 contribution to Johnson’s article noted the importance of Lencan toponymal suffixes identified by both Squier and Lehmann in determining “the former distribution of the Lenca” (Johnson 1963: 61) but she did not in that article mention any Nicaraguan occupation. Newson, commenting on Stone’s extension of the Lenca region into Nicaragua, stated that

There is some evidence to support this view in an account by Fr. Pedro de la Concepción in 1699, which records that in the area between the Olancho valley and the Rio Segovia three languages were spoken: “Lenca, this is known by a few in the rivers of the Guaiape and is common in the river Segovia and that of the Tuma, the second is of Parrastas which is called Sampiz, the third of the Guaianes is called Guaiatuni.” Nevertheless, there are more frequent references to the Taguacas inhabiting this area. It seems likely that in fact a number of Indian groups inhabited this eastern and southeastern region. (Newson 1986: 25)

Newson did not include Stone’s Nicaraguan Lenca territory within her own Lenca delimitation.

Stone also specified that Lenca predominated around the Valley of Olancho, where it bordered on the Pech language region, and that it “was heard throughout this inland section,” apparently referring to the region that she describes for the Taguaca and
labels as “Paya-Taguacas (Lenca)” on the map. It would appear that she might have based her 1966 description and map upon references to Lenca that were misidentified or where the term was applied in a general sense. She had previously noted that Lehmann thought that the word Lenca was used indiscriminately similarly to the term jicaque (1941: 12) and that “we must, therefore, accept Lenca as a general term to cover a number of different peoples and dialects, both those of definite interrelationship and those which may have only remote if any connection with one another” (in Johnson 1963: 61) but she does not here qualify her classification thusly. Chapman disagreed with Lehmann’s determination that Lenca was a generic term and also saw a post-Contact intrusion of the Lenca into Olancho and El Paraíso (1978: 19). Such a migration would cause the pre-Columbian and colonial Lenca regions to differ substantially and, therefore, lead to great confusion in the mapping of a single Lenca region that does not discriminate temporally.

Stone had presented a more mainline view of the early Lenca region in her 1941 work. There she noted that Lehmann found Vázquez’ use of the term to be indiscriminate because he applied “the name to various people in manner which leads Lehmann to believe Lenca is just as indefinite an appellation as Jicaque” (1941: 12). In spite of this possible confusion, she was able to report that “the generally-accepted version of Lenca territory is . . . around the Valley of Olancho westward into Tegucigalpa, Comayagua, Intibuca, Gracias, and eastern El Salvador” (1941: 13-14). More specifically, she pointed out that “at the time of the Conquest the Lempa river in Salvador was the western boundary of the Lenca” (1941: 12) and, after consideration of
archaeological patterns, that “hypothetically ... we can imagine that Lenca may at one time have reached the first tall ranges (the Pijol of Yoro) beyond the Caribbean Sea. And from an examination of certain phrases [sic] of the Sula-Ulúa Valley, which appear later in this paper, we can safely say that Lenca influence at least touched far north in western Yoro and in the Sula-Ulúa region” (1941: 14). Although Lenca influence may be found farther northward, most writers decline to extend the Lenca region much beyond the Río Sulaco.

The most recent monograph to treat the early Lenca was that of Anne Chapman which was published in 1978 as volume 2 of Estudios Antropológicos e Históricos and reproduced as chapter 2 of her 1985 book, Los Hijos del Copal y la Candela. Chapman reviewed sixteenth and seventeenth century documents “para intentar resolver el problema de los nombres y la ubicación de grupos que posteriormente fueron conocidos por lencas” (1978: 15). She determined that the speakers of the languages identified as Care, Cerquín, Potón, and Lenca “se refería durante los siglos XVI y XVII a un sub-grupo que habitaba determinada región de Honduras y El Salvador” which group is known today as the Lenca (1978: 19). She described the region inhabited by these speakers as including the modern Honduran departments of Comayagua, Intibucá, La Paz, Lempira, southern Santa Bárbara, central and southern Francisco Morazán “incluyendo probablemente la capital de Honduras, Tegucigalpa,” Valle and eastern [sic] Choluteca “donde colindaban con los potones de El Salvador” and modern El Salvador “al oeste del río Lempa” (1978: 19). That she intended to place the Lenca in western Choluteca, which makes more sense geographically, is supported by her statement that
the Lenca region was identified “hasta el centro de Valle y el oeste de Choluteca en la zona de la Bahía de Fonseca” (1978: 16). She also specified the southeast of La Paz and the southwest of Francisco Morazán. She also found that “en el siglo XVII (según Vázquez y Ovalle y Guevara) pequeños grupos lencas vivían en los departamentos de Olancho y El Paraíso en el este de Honduras. Parece que se refugiaron allí viéndolo en el siglo XVI del área colindante de Comayagua y Francisco Morazán, para escapar de los españoles” (1978: 19).

Chapman here presents a regional delimitation that agrees fairly well with most other descriptions of the Lenca core area occupying the western highlands (Figure 5). Her delimitation does not, however, extend as far eastward for pre-Columbian times. She concluded that the Lenca only arrived in Olancho and El Paraíso after the arrival of the Spanish. This temporal distinction regarding their eastern boundary is important and should be studied more and compared carefully to the derivations of previous delimitations showing Lenca distribution as far as the Olancho Valley. When Chapman elsewhere described the location of the Jicaque, which neighbored the Lenca to the north, she provided more detail regarding the northern border of the Lenca. She stated that “to the south the Jicaques reached the Sulaco River. In this area and in the upper Uluá Valley they were neighbors of the Lencas” (1992: 15).

All previous delimitations relied upon the presumed boundaries of other native groups, accounts of missionary activities which began in the early 1600s, or ambiguous archaeology. Chapman did not fully explain how she determined that the Lenca were not living as far east as Olancho and El Paraíso at Contact, but she seems to have based her
Figure 5. Delimitations of the Early Lenca Region.

Chapman, 1992
West, 1957
conclusion on her identification of “cuatro entidades territoriales (Care, Cerquin, Potón, y Lenca)” (1978: 21) among the pre-Columbian Lenca and the lack of reference to any of the component groups in the eastern area prior to the missions there in the seventeenth century. That she did accept that the Lenca inhabited Olancho at the time of the missions was evident when she reported that “Los Padres Espino, Ovalle y Guevara y sus acompañantes predicaron (de 1667 a 1690 aproximadamente) cerca del mismo lugar, por la confluencia de los ríos Guayape y Guayambre, donde los Padres Verdalete y Monteagudo habían perecido (1608 a 1612). Aquellos también volvieron a encontrar a los lenca y taguacas como vecinos de una de las primeras reducciones que hicieron Verdalete y los suyos, la que llamaron Sta. María” (1978: 8).

Additionally, Chapman arrived at two other conclusions of importance to us and the interpretation of early Honduran ethnohistory. The first is that she, in contrast to the opinions of Squier and Lehmann, believed the term Lenca as used in the historical documents relating to the seventeenth century to be a specific designation rather than a generic one (1978: 9, 20). She noted specifically that Lehmann considered Lenca to be a “término genérico en el siglo XVII” but she disagreed, maintaining that it “siempre se refiere a ciertos grupos específicos de la región de los río Guayape y Guayambre y del valle de Olancho” (1978: 9).

Her second pertinent observation was that Palacios’ inclusion of Potón among the languages of Nicaragua, in spite of his probable familiarity with it from a trip to El Salvador, was confused (1978: 18). She certainly accepted Palacios’ identification of Potón in what is now western El Salvador, but appears to have rejected his contention...
that it was spoken in Nicaragua. If Chapman was correct, her determination invalidates Stone’s primary evidence for the extension of the pre-Columbian Lenca into Nicaragua. Unfortunately, Chapman merely stated that Palacios’ writings evidenced confusion and that further evidence supported its presence in El Salvador while Stone believed that other evidence supported Palacios and her proposition that Potón “might have been spoken in the department of Nueva Segovia where Lenca peoples such as the Parakas appear to have penetrated in preconquest times” (1966:213). It is not possible to arbitrate between the two views on the basis of these two articles alone. Chapman, of course, did agree that Lenca had reached El Paraíso in later times and even suggested that the Spanish priest Espino, who was from Nueva Segovia and later served as a missionary in Olancho, might have learned to speak Lenca from his dealings with the El Paraíso Lenca while in Nueva Segovia (1978:9). As she saw a later Lencan arrival in the east, however, this does proposal does not in and of itself support Stone’s contention. And her specification that they extended only as far eastward as western Choluteca in the southern part of their pre-Columbian territory clearly rules out any early Nicaraguan occupation in her opinion.

Several authors have recognized the importance of place name study as an indicator of the early Lenca distribution but none of those reviewed has produced a map delimiting the toponymic region. Stone believed that “the former distribution of the Lenca can be traced fairly accurately by the place names on the present-day maps of Honduras and El Salvador” (in Johnson 1963:61). She listed the suffixes “’-ique,’ ‘-quin,’ ‘-guara,’ and ‘-gua’” as indicative of Lenca names and cited Squier (1908) and
Lehmann (1920) as sources for her list of Lenca suffixes. Newson also credited Lehmann with associating the suffixes "-tique, -quín, -aiquín, -guala, and -guara" with the Lenca but cautioned that "clearly their distribution indicates their maximum extension rather than their location at the time of Spanish conquest" (1986: 24).

The geographer Robert C. West, however, has produced a point-symbol map showing the modern distribution of selected Lenca related toponymic suffixes. The extent of Lenca place names as identified by West is shown on Figure 5. In his short manuscript, West summarized the difficulties involved in the ethnogeographic reconstruction of cultural regions in this area and proposed the utility of toponymic study in furthering the endeavor:

Although the largest Indian group of colonial Honduras, the early extent of the Lenca is uncertain. Owing partly to the large number of aboriginal dialects spoken in this part of Central America at conquest, names and extent of languages are confused in the colonial records. However, an approximation of the former extent of Lenca speech is gained by plotting the distribution of present-day Lenca place names, particularly those that end in -ique, or -tique, meaning hill, -guara, meaning river, and so forth. Such a distribution indicates that the Lenca probably once occupied much of western Honduras and the eastern third of El Salvador. (West 1957: 1-2)

West’s map of “Modern Lenca Place Names” shows the location of place names bearing the suffixes -ique, -laca, -quin, and -guara. Bearing in mind the potential problems stemming from name changes over time, such as the loss of some Lenca names in some areas and their post-Contact emergence in others, West’s map tends to support the most commonly agreed upon aspects of other Lenca region delimitations. His Lenca place names appear most densely in the zone of the western highlands from the area of Tegucigalpa to the area of Corquín in southern Copán. They also extend in moderate...
density in the northeast to roughly the Río Sulaco-Guayape line and eastward to Cerro Salpique, which is located south of La Lima, Olancho, and to the Río Gunguara, a tributary of the Río Jalán. He did not identify any Lenca toponyms as far east as the Olancho Valley, or even the Lepaguare Valley, nor west of the middle and lower Río Choluteca, and therefore close to Nicaragua. Two outliers appear in the headwaters of the Río Aguán but no toponyms approach the 86°W longitude limit that Conzemius used to confine the Pech region on the west.

The Misumalpan of the Southern and Eastern Borderlands

One of the least understood pre-Columbian indigenous situations in all of Central America is that of the speakers of the languages of the Misumalpan family who occupied the Caribbean lowlands of Honduras and Nicaragua and bordered the Pech to the south and east. The paucity of linguistic and archaeological investigation in this region leaves little but ethnohistoric evidence, itself extremely sparse, upon which to glean some understanding of its early inhabitants. Healy (1984: 115, 158-159) explicitly excluded this area from his review of Honduran archaeology because of the dearth of investigation here.

Further testimony to the lack of archaeological work in the area is provided by the omission of any archaeological review of eastern Nicaragua elsewhere in that entire volume, which was devoted explicitly to The Archaeology of Lower Central America, and which included chapters devoted to El Salvador, Honduras, Greater Nicoya (comprised of western Nicaragua and northwestern Costa Rica), the lower Caribbean (which focused primarily on Costa Rica and Panama and cited only three articles by
Magnus dealing with Nicaragua “from Pearl Lagoon to Bluefields Bay” (1984: 208)),
Greater Chiriquí, and Central and Eastern Panama.

On the linguistic front, Campbell highlighted the lack of research on the
relationships of these languages when he noted that “the Misumalpan family is generally
considered a branch of Macro-Chibchan, though little has been done to demonstrate it”
(1979: 944), and that “Misumalpan as a family has long been recognized, though no
rigorous historical study has been done” (1979: 945). The tentative and uncertain nature
of these languages, and their speakers, is seen in the comparison of various linguistic
classifications and maps. Mason, Stone, and Campbell each presented a Misumalpan
family but their constituent members varied somewhat. Mason presented Misumalpan as
a language stock that he classified as possibly related to his Macro-Chibchan phylum
(1940: 60, 86). He explained that “the term Misumalpan is suggested as a concise
synonym for Mosquito-Sumo-Matagalpa” which were themselves only representatives of
some of the sub-families and languages of the three constituent families of the
stock—Mosquitoan, Suman, and Matagalpan (1940: 75, 86). Each family contained
several dialects that were listed in the table on page 86. Stone presented Misumalpan as
“a group . . . which may be part of a larger Macro-Chibchan entity” which included the
Matagalpa, Misquito, Taguaca (Sumu), and Ulva languages (1966: 210). Stone
apparently followed Lehmann’s classification, as did Newson when she reported that
“Lehmann considered that Atlantic Nicaragua was inhabited by four linguistic groups:
Miskito, Ulua, Sumo-Tauaxha, and Matagalpa” (1986: 41). Campbell’s Misumalpan
family included the Miskito, Sumu, Cacaopera, and Matagalpa languages. Mason had
included Cacaopera as a dialect of the Matagalpa language (1940: 86) while Stone did not include it in her list, perhaps because El Salvador was not included in her review. In his more recent review, however, Campbell, in contrast to Mason, noted that
"Cacaopera and Matagalpa together have been called Matagalpan, and are frequently thought to be merely dialects of a single language. However, they are separate languages . . . " (1979: 944). Another divergence in these classifications is seen in Mason’s, Stone’s, and Newson’s, each of which derived from Lehmann, inclusion of Ulva as a Misumalpan language while Campbell stated that “Sumu has considerable dialect diversity, including varieties called Tawahka, Panamaka, Ulua, Bawihka, and Kukra, among others” (1979: 945). Mason reported that Conzemius had divided the Sumu into the same groups which Campbell listed as dialects and noted, further, that “the relationships of the members of the Suman family are most uncertain; a great amount of borrowing has taken place and many of the languages are much mixed” (1940: 75).

Johnson’s survey of Central American Cultures for the Handbook of South American Indians produced yet another classification of these groups (1948; 1963). He presented a chart that categorized the various groups of Central America, and their constituent tribes and subtribes, according to the various geographic divisions that they inhabited. This chart classified the Mosquito and Sumo groups, and their subdivisions, under the “Caribbean Lowland: East” division. Ulva was classified as a tribe of the Sumo. The other Misumalpan member, the Matagalpa, was classified under the “Northern Highlands” division, along with the Lenca.
In addition to the confusion caused for ethnohistorians arising from the uncertain relationships among the speakers of the various languages and dialects, as seen in the divergent classifications of the languages and culture groups, the use of the various labels in the historical documents has suffered from potential misapplication, misidentification, and changes both in terminology and ethnic composition over time in the region. Stone (1966:213) and Newson (1986:41) both noted that the term Sumu itself is not found in the early historical documents because, being a Miskito word that refers to inland peoples, it did not come into use until after the ethnogenesis of the Miskito themselves. Conzemius described in greater detail the variety of terms, and their confusion, applied to the peoples known today as Sumu:

The Spanish historians of the sixteenth century included the Sumu under the general term “Chontal” or “Chondal,” a Mexican word which means merely “stranger,” “foreigner,” and was applied by the Nahuatl to any primitive tribe. In later documents the Sumu are mentioned as “Caribes,” “Chatos,” “Albatuinas” (from the Miskito Albawina) and by a number of other names. To-day the whole group is generally known by the Miskito designations “Sumu” or “Smu,” which have already been used by Bell and Wickham. Some writers have mentioned the whole group under the names Twahka and Ulwa, which, properly speaking, should be restricted to two subtribes thereof. Lehmann’s classification of the Sumu tribes is likewise unsatisfactory. With the word “Sumu” we have a convenient name for the whole of these various dialects; its use will avoid the sad confusion met with still in the recent literature. (Conzemius 1932:15-16)

Johnson, likewise, provided a short history of the term:

*Sumo* is a generic name given by the *Mosquito* to a number of tribes speaking a language closely related to *Mosquito*. . . . Almost nothing in the 16th-century documents can be construed as a description of the *Sumo*, and, as a matter of fact, little was known of them until the very last of the 17th century. Beginning with the 18th century, the increasing amount of information, principally from travelers’ accounts, defines 10 subtribes of which 6 are now either extinct or combined with other groups. (Johnson 1963: 58-59)
Stone (1966: 212) included Ulva and Taguaca among several terms that were broadly applied to a variety of indigenous inhabitants in the early documents and Newson added another possible source of confusion resulting from the generic use of the term Ulua when she noted that "Chapman suggests that the widespread occurrence of the term Ulua in the northern Chibcha area suggests that it had a generic meaning in Chibchan, in which case it cannot be used as definite evidence for the presence of Ulua Indians" (1986: 42).

The result of the confused use of the various designations in the historic documents and the subsequent ethnohistoric literature, with no archaeological evidence available to help clarify the picture, is evident in the variety of culture region descriptions and cartographic delimitations presented for this area. Even the authors who have called our attention to the vague use of the terminology have not always been immune to falling prey to its complexities.

Campbell did not describe the early distributions of the Misumalpan speakers in his 1979 work. He did state that Miskito and Sumu are still spoken in both Nicaragua and Honduras and that "Cacaopera (of eastern El Salvador) and Matagalpa (of Honduras)" are both now extinct (1979: 944). He further noted that "all available Matagalpa material is reprinted in Lehmann (1920: 599-604); the language has been extinct at least 100 years" (1979: 945). From his parenthetical association of Matagalpa with Honduras, it would seem that he accepts a former Matagalpa presence within Honduras.
Healy did not include the Miskito, Sumu, or Matagalpa in his “seven major native groups which were present in Honduras at the time of the conquest” (1984:115). He did, however, include the Ulva, which he described as “part of the Matagalpan linguistic family. Only limited information is available on this group, which is found in eastern El Salvador, northwest Nicaragua, and southern Honduras” (1984:116).

Johnson’s 1940 map delimits, in addition to most of the Caribbean slope of Nicaragua, a strip of territory within Honduras along practically the entire Honduran-Nicaraguan border within the region of the Mosumalpan speakers. Within Honduras, only the area around Caratasca is shown as Mosquitoan territory. The remainder of the Honduran Mosumalpan borderlands are divided among the various subgroups of Suman, including the Ulva in the southernmost part of the country to the east of the Gulf of Fonseca. The Matagalpa territory lies entirely within Nicaragua. In his accompanying notes regarding the Suman Family he stated that “the Sumo occupied a large portion of Nicaragua and sections of El Salvador and Honduras. The many names for the apparently numerous groups of Sumo are confusing. . . . The boundary lines have been added simply for convenience” (Johnson 1940:112). Although he mentioned El Salvador in the text, his map did not actually show any Suman distribution in that country.

In his 1948 survey of Central American Cultures for the *Handbook of South American Indians*, Johnson (1948; 1963) added a little detail to his descriptions of the Misumalpan groups’ regions. Since his classification categorized the groups primarily according to geographical divisions rather than linguistic relationships, however, the
Mosquito and Sumo were considered as part of the eastern Caribbean Lowland division, along with the north coast group comprised of the Paya and Jicaque. The Matagalpa were classified with the Lenca as part of the Northern Highlands division. Johnson noted that limited information concerning the Misumalpan groups hinders the reconstruction of their Contact regions.

Johnson (1963: 58) seemed to accept the existence of the Miskito at the time of Contact while acknowledging their incorporation of "African traits" after the 1641 wreck of a slave ship of the coast. Although he noted (1963: 58) that "the first satisfactory record [of the Miskito] was made by Exquemelin in 1672," his statement that "it is probable that Mosquito were living between Cabo Gracias a Dios and the Río Wawa" appears to apply to the period from Contact to about the middle of the seventeenth century. He also believed that as the Miskito subsequently expanded their territory, the Mam subtribe "moved to the Río Patuca, absorbing some of the indigenous Paya and driving the remainder to the west" (1963: 58). Such a history follows Conzemius' ideas concerning the ethnohistory of the region and contradicts Davidson's revision.

Concerning the Sumu, Johnson (1963: 59) reported that "almost nothing in the 16th-century documents can be construed as a description of the Sumo, and, as a matter of fact, little was known of [the Sumu] until the very last of the 17th century." He provided slightly more detailed information for the two subtribes that are mentioned by other writers as possible Contact-era neighbors of the Pech than he did in his 1940 work. He gave no indication of the pre-Columbian distribution of the Twahka Sumu, stating
only that, they currently “live in five villages located in Honduras along the middle
reaches of the Río Patuca. . . . [and] are slowly being absorbed by the Mosquito” (1963:
59). He reported of the Ulva that

Early knowledge of this tribe in eastern Nicaragua is scanty. They were probably
neighbors of the Rama, occupying a stripe of territory between Lake Nicaragua
and the coast. They also occupied sections of southern Jinotega and were
distributed to the west along the northern slopes of the Nicaraguan Lowland,
extending through Honduras into eastern El Salvador (Ponce, 1873, vol. 1; Squier,
1860 a). They occupied the western parts of their territory in company with Chorotega, Nahuañatan, and possibly even Lenca, Matagalpa, and other groups.
(Johnson 1963: 59)

By this time Johnson also expressed a stronger belief that the Matagalpa did
indeed occupy portions of Honduras than was evident in his 1940 work. Although he
admitted that the “information concerning the Matagalpa is limited” and that “at the
present time knowledge of them is confined almost exclusively to their language,” he
noted that “the early information indicates that the language was spoken in northwestern
Nicaragua and southwestern Honduras” (1963: 61). This description represents and
expansion of the Matagalpan region that he delimited in 1940 to incorporate portions of
southwestern Honduras.

Conzemius’ 1932 monograph on two of the Misumalpan groups, the Miskito and
Sumu, considered the Matagalpa only briefly in that they were western neighbors of the
Sumu. He stated that “the western portion of the Mosquito Coast was formerly
occupied by the Matagalpa, whose language has been extinct for nearly half a century; a
dialect of it is still spoken to this day in the villages of Cacaopera and Lislique
(Salvador)” (1932: 6).
Although Conzemius reviewed the reports containing ethnographical information on the Miskito and Sumu, most of which date from the latter half of the seventeenth century onward, he did not attempt to define the pre-Contact territories of these peoples. From the earliest documents, he reported only that although “Columbus sailed along the Mosquito Coast from north to south in 1502 . . . he appears not to have come in contact with either Miskito or Sumu” (1932: 9). He noted that at the time of his writing “these two tribes occupy the larger part of the vast region generally known by the name of Mosquito Coast. This territory reaches from Cabo Honduras, near Trujillo, to Rio San Juan, at the Coast Rica boundary” (1932: 1). More specifically, he described their region as “the Atlantic side of Honduras and Nicaragua, from Rio Tinto or Black River (lat. 15° 50' N.) to Rio Punta Gorda (lat. 11° 30' N.). While the Miskito are found chiefly along the coast the Sumu are an inland tribe and extend westward within a short distance from the settlements of the Spanish-speaking population” (1932: 1).

Conzemius believed that the Miskito evolved into a distinctive group after Contact, and his proposal for the process of their ethnogenesis provides a clue to his understanding of the early distribution of the Sumu. He believed that it is very probable that the Miskito were originally a subtribe of the Sumu, and that they have become greatly modified in the course of the centuries through intermarriage with Negroes, Europeans, and other Indian tribes. . . . Of the various Sumu subtribes still existing, the Bawihka is the one which linguistically and ethnographically presents the greatest affinity to the Miskito. The Bawihka formerly occupied the region immediately adjoining the coast line where the Miskito were met with by the first Europeans during the latter part of the seventeenth century. These facts induce me to believe that the hybrid tribe of the Miskito owes its origin to the intermarriage of the Bawihka with the Negroes escaped from the slave ship which was wrecked to the south of Cabo Gracias a Dios in 1641. (Conzemius 1932: 17)
From this description we can see that Conzemius accepted a Sumu presence on the Caribbean coast at least as far north as about the area of the mouth of the Rio Coco by the mid 1600s. This agrees with his pre-Columbian Pech region delimitation as extending southward along the coast to the area of Caratasca.

From the historical documents and his own experience, Conzemius provides us with indications of the lands inhabited by the Miskito and Sumu in the vicinity of the Pech in earlier times, although not as far back as Contact. He reported that “in 1699 the Miskito occupied the seacoast from Cabo Camaron in Honduras to about 57 miles south of Brangmans River (=Wawa River?), where the territory of the Sumu began” (1932: 13). No comparable dates are mentioned for the Sumu, but Conzemius did state that, at the time of his writing, “the Twahka inhabit the northern section of the Sumu territory and are found on the rivers Patuca (Guampú), Coco (Lakus and lower Waspuk), Wawa and Kukallaya” (1932: 14), and that Francisco Martínez, a Honduran schoolteacher, worked in “the Sumu village Guampú on the Rio Patuca” in 1916-17 (1932: 12).

Anne Chapman’s 1958 dissertation included the Misumalpan groups in addition to the Jicaque and Paya among her “Lowland tribes” (1958: 15) of Caribbean Honduras and Nicaragua. She described the early territory occupied by the Misumalpans:

The country inhabited by the Miskito, Sumu, and Matagalpa is lowland, hilly and mountainous and includes inland central and southern Honduras and the entire Atlantic coast of Nicaragua inland to the eastern shores of the Nicaraguan lakes. In Honduras it stretches across the eastern section of the department of Olancho and the departments of Colón and El Paraiso; in Nicaragua it covers the Comarca del Cabo, and the departments of Zelaya, Jinotega, Nueva Segovia, Madriz, Estelí, Matagalpa, Boaco and Chontales. (Chapman 1958: 37)
Chapman's description of the Honduran portion of the Misumalpan territory can only be understood properly by noting that the easternmost department of the country, Gracias a Dios, which is the past and present home of the majority of Miskito and Sumu Hondurans, was not created until 1957, shortly before Chapman finished her dissertation. Prior to 1957, the lands east of 85°W longitude comprised the eastern part of the department of Colón. With this in mind, then, Chapman's description in terms of modern Honduran political geography would include the eastern parts of the departments of Gracias a Dios, Olancho, and El Paraíso. Such a reading more closely matches other descriptions of Misumalpan territory, since no other author proposes that these peoples inhabited the area of present day Colón. It also fits with her description of the Jicaque-Paya territory as extending eastward to about the Río Patuca (1958:36).

In her discussion of the Matagalpa, Chapman drew from the works of Brinton (1895) and Lehmann (1922) to extend this Misumalpan region to include the Cacaopera speakers of eastern El Salvador (1958:61). Of particular interest to us, she also noted specifically that Lehmann had reported that Matagalpa was spoken "in Danli in the department of El Paraíso, Honduras" (1958:61). The linguistic map of Honduras and El Salvador that accompanied her study of the Lenca identifies these areas as zones of Matagalpa speech in the sixteenth century (1978:23). While the Danli Matagalpa area is shown as bordering the Lenca on the east and, it is assumed, is contiguous with a larger Matagalpa region in Nicaragua, the Cacaopera Matagalpa area is presented as an exclave separated from the rest of the Matagalpa region by the Lenca speakers of southern El
Salvador and Honduras. Although the map is lacking in detail outside of the Lenca region, the Danlí Matagalpa are also shown to border the Paya to the north.

Chapman also called attention to a possible source of confusion in the varying delimitations of the early culture regions of southern Honduras and neighboring parts of Nicaragua when she noted that “both the Matagalpa and the Sumu were referred to by Oviedo and other early chroniclers as the Chondales and Ulvas or Ulwas and by later writers as Xicaques, Lencas and Caribs” (1958: 61-62). Such early designations may account for delimitations of Ulva in southern Honduras and eastern El Salvador.

Chapman accepted Conzemius’ thesis that the Miskito descended from the Sumu, agreeing that “the Miskito were originally, in pre-Hispanic times, a Sumu people, and that they emerged as a distinct group by virtue of their contact, both cultural and physical, with the Africans and Europeans in the seventeenth century” (1958: 57). She summarized the knowledge of their early distribution:

> It is quite certain that the Indian ancestors of the Miskito inhabited the area of the mouth of the Segovia River in pre-Hispanic times. Just how far they extended along the coast or inland is not known. There is no information at all referential to the inhabitants of the Caratasca Lagoon west of the Segovia. It may have been uninhabited or inhabited by either these people or the Paya. Along the coast to the southeast the Miskito territory extended at least as far as the Huahua (Wawa) River and not farther than the San Juan River, at the present border of Nicaragua and Costa Rica. (Chapman 1958: 55)

And concerning the Sumu, she wrote:

> While the Miskito were localized along the coast, the Sumu were spread out surrounding them. They extended from the Caribbean coast near the Prinzapolca River in a wide, curved belt through the mountainous hinterland of Nicaragua to the middle Patuca River and perhaps somewhat farther west in central Honduras. (Chapman 1958: 58-59)
Concluding her description of these groups, she cautioned, "It can be seen from the above enumeration that the Sumu were much more widely spread and differentiated than either the Miskito or the Paya. However, all the linguistic data on dialectic grouping given by Conzemius and Lehmann can be considered only as an approximation to the pre-Conquest situation" (1932: 60-61).

The most recent research concerning the early distribution of the Misumalpan groups in Honduras dealt with only one subgroup, the Tawahka Sumu, and was published by William V. Davidson and Fernando Cruz S. in 1988. Their article, "Delimitación de la Región Habitada por los Sumos Taguaças de Honduras, 1600-1990," considered the evidence provided in historical documents as well as the modern distribution of Tawahka-derived place names to estimate the extent of Tawahka territory since the arrival of the first Spanish missionaries in the region in the early seventeenth century. While they cautioned that the historical sources cannot provide an exact determination of the early Tawahka region, they also reported finding no evidence therein to indicate that other native groups challenged the Tawahka Sumu for dominance within the region that they propose. They concluded that "La mayor extensión de su territorio, probablemente alcanzado a fines de siglo XVII, . . . apenas se extendía un poco más allá de los límites de sus topónimos modernos" (1988: 129-131).

Davidson and Cruz's map of the distribution of Tawahka toponyms within Honduras delimits a region in the southeastern part of the country along the Río Coco from the area of Las Trojes, El Paraíso, to about the confluence of the Ríos Lasatingni and Coco. In the southwest, it includes roughly portions of the drainage basin of the
Ríos Patuca and Coco, while excluding the drainage of the Ríos Guayambre, Guayape, and Tinto. In the northeast, the Tawahka region includes the basin of the lower Río Wampú and portions of the drainage of the Ríos Patuca and Coco, while excluding the drainage of the upper Ríos Wampú and Plátano. The area thus delimited includes the territory that has been mapped by Herlihy (1990) as the currently utilized subsistence lands of the modern Tawahka Sumu Indians.

The Tawahka region delimited by Davidson and Cruz provides the best indication of the extent of Tawahka territory around 1700 and their research in the historical documentation found nothing to contradict Tawahka control of that territory as far back as the beginning of the seventeenth century. This delimitation contradicts several of the prior Pech region delimitations by including lands northwest of the Patuca but fits well with Davidson's delimitation of the early Pech boundary at about the Guayape Fault.

Another recent work to consider the early regions of the Misumalpan groups was Jaime Incer's 1988 article, "Nuevo enfoque sobre la distribución de los grupos indígenas de Nicaragua en los siglos XVI y XVII." While Incer's study was concerned primarily with the early territories of native groups within Nicaragua, his delimitation of regions along the Nicaraguan-Honduran border provides us with a perspective from the area south of the Pech region that can be compared with the regional delimitations within Honduras to lend support to, or challenge, the various Honduran delimitations.

Incer's map of the "Distribución temprana de los grupos indígenas en Nicaragua" delimited native territories within Nicaragua on the basis of historical documents and, in larger part, the distribution of indigenous place names (1988: 76). Incer's delimitations
place almost the entire northern border of Nicaragua within the territories of Misumalpan linguistic groups. The Chontal-Matagalpa region extends along the international border from Cosigüina volcano on the Gulf of Fonseca to the intersection of the Río Coco with the Honduran border. Eastward from that point to the location of Leimus in far northeastern Nicaragua is delimited as former territory of Sumu peoples. Incer delimits the borderland from Leimus to the Caribbean coast as Miskito territory. His inclusion of a Miskito region along the coast of Nicaragua indicates that Incer’s map is not intended to represent the native situation at Contact but, rather, at about the end of the seventeenth century. That his map represents the distribution of the Miskito at about 1700 is indicated by his statement that, by the end of the seventeenth century, the Miskito had extended their region up the Río Coco as far as present day Leimus, which is precisely where he delimits the boundary between the Sumu and the Miskito.

While the details of Incer’s delimitation differ substantially from those of Johnson (1940) and Stone (1966), the overall distribution of Misumalpan peoples in the Nicaraguan-Honduran borderlands compares favorably with Johnson’s delimitation as well as with the more recent works of Chapman (1978) and Davidson and Cruz (1988). Of primary interest to us, the boundaries of Incer’s early Nicaraguan Sumu region are shifted slightly eastward along the Río Coco in comparison to the Tawahka region delimited by Davidson and Cruz, but the overall correspondence of the two delimitations on either side of the international border is rather good. It should be noted that Incer identified two subtribes of Sumu, the Panamaka and the Tawaka, as borderland inhabitants of the larger Nicaraguan Sumu region while Davidson and Cruz classified the
entire territory delimited on the Honduran side as Tawahka. The close correspondence between the two delimitations of Sumu toponyms, however, tends to support the idea of a larger, contiguous, and international Sumu toponymic region. Incer’s Nicaraguan Sumu delimitation, then, while not addressing the extent of Sumu penetration into Honduras, does serve to reinforce the validity of Davidson and Cruz’s work, at least in terms of early Sumu distribution along the international border.

This article also provides other insights that may help to untangle the conflicting delimitations elsewhere in the region. Incer was, of course, aware of the origins of the modern Miskito when they began to mix with shipwrecked African slaves after 1640, but he also believed that their ancestors were a subgroup of the Sumu who had already mixed with other native groups as well as shipwrecked Spaniards prior to the arrival of the Africans (1988: 80). He reported that “algunos etnólogos creen que los primeros Misquitos fueron a su vez mezcla entre los Guayas y los Sumus-Bawihkas” (1988: 80). The Guayas, or Guabas, “vivían junto a la laguna de Caratasca” when fray Cristóbal Martínez conducted missionary activity there about 1620 (1988: 80). These statements are some of the few to identify inhabitants of the area around Caratasca, an area claimed variously for the early Pech or Sumu, in the early Spanish period. Unfortunately, Incer’s only reference to the Guaya is to suggest that they mixed with Sumu peoples to create the first mixture that eventually evolved into the Miskito. Incer also stated that “antes del siglo XVII los Misquitos eran un pequeño grupo confinado a la franja litoral entre Caratasca y el cabo Gracias a Dios” (1988: 80). He therefore placed the early Miskito
north of the Río Coco, in contrast to other statements that seem to place them south of the river.

Another piece of information that could help clarify the confusing delimitations in southern Honduras and northwestern Nicaragua is found in Incer's discussion of the Matagalpa. He noted that Lehmann originally confused the Ulúas, who inhabited the lands around the Gulf of Fonseca and neighbored the Matagalpa, with a Sumu subgroup. the Ulvas or Ulwas, that inhabited the southwestern corner of the Nicaraguan Sumu region. Perpetuation of such confused identification could explain the large Ulva territories delimited by Johnson (1940) and Stone (1966) and described by Johnson (1963) in 1948, each of which overlaps considerably Incer's Chontal-Matagalpa region. In a footnote to his chart, "Classification of Tribes in Central America," Johnson hinted at such possible confusion when he stated that "it is possible that the Ulva should be classified as a group as well as a tribe" (1963:66). And Stone also seemed to recognize the potential for confusion when she included Ulva among "three over-all designations in the early documents... applicable to diverse groups which were dialectically and ethnologically bound together" (1966:212).

The Problem of the Mexican Presence

Another group of indigenous neighbors to the Pech at the time of Contact that must be considered is the Mesoamericans. Mexican interpreters and assistants accompanied the Spanish conquerors and missionaries in their work in Honduras spreading, in the process, evidence of Mexican occupation and influence in the country shortly after Contact that has served to confuse the pre-Columbian situation for
ethnologists depending upon Spanish documents to understand and reconstruct the aboriginal conditions. Newson explained this possibility for confusion:

Another problem in relating languages to specific Indian groups is that even where documents do refer to Indians speaking Nahuatl it does not necessarily mean that it was their native language. Nahuatl was used as a lingua franca in the early colonial period and in many cases was introduced by the Spanish. Place-name evidence is also unreliable for the same reason. Whilst some villages with Mexican names may indeed have been inhabited by Mexicans in the pre-Columbian period, others were given those names during the early colonial period. Unfortunately there is little archaeological evidence for the presence of Mexican cultures in Central America that would help to clarify the picture painted in the documentary record; Lothrop suggests that Mexicans tended to adopt the culture of the Indian groups they met in the course of their migrations, and their intermarriage with them might explain the relative lack of material evidence of Mexican culture. (Newson 1986: 31)

In spite of the post-Contact introduction of many Mexican place names and ethnic labels, researchers agree that there was a Mesoamerican presence in Honduras prior to the arrival of the Spanish. Mason described some of the mechanisms of establishment of central Mexican language enclaves in Central America, both before and after Contact, while discussing his Utaztecan language family:

The break-up of the Toltec "Empire" about the year 1000, the Aztec custom of establishing colonies for trade and control of subjugated peoples, and the similar Spanish practice with friendly colonists, especially the Tlaxcaltecs, spread Nahuatl groups all over Middle America, often supplanting more autochthonous languages. (Mason 1940: 69)

Sharer (1984: 65) reported that Mayan influence was also spread to lower Central America, particularly via the oceanic trade route along the Caribbean coast. Healy (1984) likewise touched upon the existence of Mesoamerican traders operating in Honduras at the time of the arrival of the Europeans. He noted that the archaeological site of "Naco in the Naco Valley along the middle of the Chamelecon . . . is known to

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have participated in long-range Mesoamerican maritime trade stretching around Yucatan to at least the north coast of Honduras” (Healy 1984: 149). He further explained that “there is no direct evidence for the linguistic affiliation of Naco, though Henderson (1977a: 369) believed a Chontal-Maya enclave to be a reasonable possibility. Nahua-speaking Pipil are at least as likely and may have facilitated trade between the Pacific coast and the Gulf of Honduras (Stone 1941: 97; Baudez 1976b: 143; Henderson 1977a: 369-70)” (Healy 1984: 149-150).

Of course, the western portions of Honduras have long been included as part of Mesoamerica proper and delimitations of the southeastern border of Mesoamerica in Honduras have varied both among researchers and depending upon the time for which the border is delimited. Scholars have also, however, recognized important Mesoamerican areas within Honduras eastward of the limits of the area generally considered to have been predominantly Mesoamerican in culture or influence. It is these outposts or exclaves of Mesoamerican influence within or near the proposed aboriginal Pech region that we now consider.

Scholarly opinions have varied as to the locations and extent of Mesoamerican controlled zones in eastern Honduras. Perhaps the most debated of these zones is that of the Bay Islands and the adjacent mainland in the vicinity of Trujillo. The nature of the indigenous inhabitants of the Bay Islands is important to the Pech question not only because it determines the Islands’ inclusion within or exclusion from the Contact era Pech region but also because it serves to create the perspective or paradigm out of which the nature of the mainland is interpreted ethnohistorically. The use of Bay Islanders as
interpreters by the early explorers and missionaries is often cited as an indicator of the culture of the mainland inhabitants. That is, the ability of the Bay Island natives to communicate with natives in various parts of the mainland has often been assumed to illustrate cultural ties between the Islands and those mainland areas and the culture attributed to the Bay Islanders is therefore attributed to the mainland inhabitants with whom they could communicate. Thus, the native culture attributed to the Bay Islanders by a particular ethnohistorian in large part determines the nature of that scholar’s interpretation of the neighboring mainland’s culture regions. Two groups, the Maya and the Pech, have most commonly been proposed as the dominant inhabitants of the Bay Islands at Contact and the variations seen in the delimitations of the coastal portions of the early Pech region are usually attributable to the particular researcher’s acceptance of one or the other group as the occupants of the Islands and to the researcher’s subsequent geographical interpretation of the historical documents describing the mainland areas in which the Bay Island natives were useful as interpreters.

Conzemius was one of few writers who suggested the possibility that the Bay Islanders could have served as interpreters with the mainland natives even though they may not have been members of the same culture group. In a footnote, Conzemius indicated that he believed that the inhabitants of the Bay Islands were Mayans who served as interpreters for Columbus as far as Cape Gracias a Dios and for the Franciscan missionary Padre Cristóbal Martínez Puerta in 1622 in the interior by speaking with the Pech in Mayan (1928: 1-2). He accepted Lehmann’s contention that Maya was widely spoken in this area at Contact and therefore thought that it could have served as a lingua
Franca in eastern Honduras. This thesis, and especially the extension of Mayan language into the interior of eastern Honduras, is not usually mentioned by later writers delimiting an early Pech region.

Johnson's 1940 map classified the Bay Islands as Paya. He did not, however, explain how he arrived at that classification.

Stone (1941: 10, 93) appears to have accepted the likelihood of a Pech presence on the Bay Islands because of the Spaniards' use of an Island interpreter in the mainland area that she identified as Pech as well as because of archaeological similarities which she noted between the Pech mainland and the Bay Islands. Her acceptance of a cultural link between the Bay Islands and the mainland east of Trujillo is also seen in her 1966 description of the Pech region where she noted that an interpreter that Columbus "took on board at the Bay Island of Bonocco was useful on the mainland near the Aguan River" (Stone 1966: 214).

While Stone apparently believed that the Pech inhabited the Bay Islands at Contact, she also saw a strong Mayan presence along the north coast as far eastward as Trujillo and her determination of this eastward Maya extension has served as a point of departure for other writers, especially Chapman, who argued for a Maya occupation of the Bay Islands. Stone noted that Peter Martyr's writings from 1516 reported the existence of two native regions, Táia and Máia, on the mainland south of the Bay Islands at the time of Columbus' voyage to Honduras (1941: 9). She also noted that "Dr. S. K. Lothrop has already called our attention to the 'Probanzas' of Diego Columbus, which contain the statement that the Admiral 'discovered a land called Maya, which was and is
the point called Cajines'" (Stone 1941: 14). The references to Máia in the writings of Martyr and to Maya in the Probanzas, Stone asserted, "have been to a land, or a region, and may well be considered the eastern limits of an actual Maya province" (1941: 14).

Stone argued that the term Taia could have been a mistranscription of the paleography from Paia and, therefore, a direct indication of Paya occupation of the north coast at the time of Columbus' visit (1941: 9). She felt, therefore, that the pre-Columbian Honduran coast was divided at the longitude of Punta Caxinas and Trujillo, as indicated in the Probanzas, into territories controlled, to the east, by the Pech and, to the west, by the Maya. She found other evidence to support this placement of the Maia-Taia border in Lothrop's use of Martyr's accounts which provided information obtained by the Admiral on "Guanassa" Island: "He told about the nature of a land toward the west. He took his way straight toward the west. A little more than the tenth mile beyond, he found a large stretch of land, it was called Quiriquetánam from the name of the inhabitants; but he named it Ciámba... In this great tract there are two regions, the one is called Táia, the other Máia..." (Martyr 1516, Dec. III, lib. IV. in Stone 1941: 9)

In addition to the indications of Martyr's account and the Probanzas statements, then, Stone felt that the cultural border was most probably near Caxinas because "if the position of the province of Taia, Iaia or Paia was eastward from Cape Caxinas or Trujillo, it fits exactly with the known ethnography of this region" (1941: 9). Finally, after considering the linguistic evidence from other documents, Stone stated that

It would seem then that Maya-speaking people inhabited the whole stretch of the coast from Campeche through the Ulúa River. From here eastward, there is no evidence of the spoken language. However, based on archaeological evidence, artifacts bearing a definite Maya relationship have been found as far east as Trujillo. This bears out the historical references to a Maya region continuing to Caxinas. The Jicaque, who also historically inhabited the section from the Ulúa to
Caxinas, may have been pushed back by the Maya or may have been intermixed with them. (Stone 1941: 15)

In spite of the absence of documentary evidence, then, she speculated that the Maya, and possibly the Tol, may have occupied the north coast up to the cultural border that she identified near Trujillo.

The proposal in the works of Lothrop and Stone of Maya control of part of the mainland south of the Bay Islands was accepted in a limited fashion by Chapman. She apparently did not believe that the entire coast from the Ulúa to Trujillo was controlled by the Maya, but she did accept the presence of Mayan outposts or exclaves on the Bay Islands and near Trujillo as indicated in her passage:

The entire Bay of Honduras west of the Ulúa Valley was an area of many towns and an important long-distance trading center for points west, north, and south leading to the Basin of Mexico, Yucatan, and Panama. East of the Ulúa Valley the Yucatecan traders also may have had ports of trade on the Bay Islands and adjacent mainland in the vicinity of Trujillo. Inland were two provinces of Nahua speakers: Papayeca and Chapagua. Also east of the Ulúa, along the coast and inland, were the Jicaque and, continuing east of Trujillo, the Paya. (Chapman 1958: 17-18)

Specifically concerning the situation near the Pech region, she reported that

there is little agreement among the specialists concerning the identity of the inhabitants of the Bay Islands and the adjacent mainland in the vicinity of Trujillo at Point of Caxinas, or Guaimoretto Lagoon, as it was variously called. Some believe this area was occupied by Jicaque, others contend that the Paya lived there, and elsewhere it appears that the Yucatecan Maya had established a trading post there. It seems to this writer that the weight of evidence supports the last hypothesis and, inconclusively, that either the Jicaque or Paya also may have lived there. (Chapman 1958: 49)

And she further emphasized her opinion when she stated that

In conclusion it may be said that in all likelihood Maya traders, at the time of the Conquest, lived on the Guanaja Island and the adjacent mainland, that there were
Nahua settlements inland from Trujillo, and that the Jicaque and Paya dwelt in the vicinity to the west and east respectively. (Chapman 1958: 52)

Chapman favored the idea that Mayans inhabited the Trujillo area based primarily upon Lothrop’s (1927: 355) determination “that the mainland opposite Guanaja was a Maya province and that the canoe was en [sic] route from Honduras to Yucatan” (1958: 51). She concluded that “in all likelihood, therefore, the traders were Maya, and the region a Maya port of trade” (1958: 51). She also believed that Columbus’ Bay Island translator’s inability to converse with the “Paya natives . . . at the mouth of the Black River” (1958: 51) proved that the Bay Islanders were not Pech.

Chapman, in support of the view that the Trujillo area was Maya at Contact, quoted Lothrop’s report that in the Probanzas of Diego Columbus “no fewer than twenty-two witnesses testified in answer to a set of questions ‘that the said Admiral, on the last voyage which he made discovered a land called Maya, which was and is the point called Caixines’” (Lothrop 1927: 353-354 in Chapman 1958: 49).

Davidson, in contrast to Chapman and in stronger terms than Stone, supported a pre-Columbian Pech occupation of the Bay Islands and adjacent mainland. Already in 1974 his interpretation of the historical documents, linguistic evidence, and archaeological research record led him to believe that the Bay Islanders “were part of the larger culture area east and south of Trujillo, identified as Paya” (1974: 29). Concerning the possibility of a Maya presence in the area, he wrote:

Still unclear are the relationships between the Maya area and the Bay Islands, and the eastward extent of Maya influence in the Bay of Honduras at the time of Spanish contact. During the Maya Early Classic, there was apparently an eastern extension of influence that included the islands. In the Post-Classic, the islands
show no evidence of trade with Honduras and only slight trade connections with Yucatán. Maya trade goods were again appearing in the islands at the beginning of the sixteenth century. Perhaps at the time of European contact Maya trade in the Bay of Honduras was being reestablished to the degree that, as Sauer (1966: 130) suggests, "the land of Mayan ways" reached along the north coast of Honduras to the Río Negro, seventy-five miles east of Trujillo. The uncertainty surrounding the location of the southeastern boundary of the Maya realm at European contact, as proposed by Kirchhoff (1943), is indicated by the alternative locations suggested by several writers (Lothrop 1939; Longyear 1947; Aplicano Mendieta 1969). (Davidson 1974: 29-30)

Davidson’s 1991 chapter provides more detailed evidence and considers scholarly production during the intervening years to support the same conclusion that he reached in 1974—that the pre-Contact Bay Islands and adjacent mainland were inhabited by the Pech. Because the focus of his chapter was the early Pech, however, he included a more detailed consideration of their distribution on the mainland in addition to the Bay Islands. Although he noted that the "Pech area probably contained alien enclaves" (1991: 212), from the delimitation of the early Pech region which he presented in this article it is clear that he did not accept any widespread Maya presence on the mainland coast from the Río Cangrejo to the Río Negro. And the only foreign enclaves that he mentioned specifically were those of the Nahua speakers south of Trujillo in the Aguán Valley.

Healy’s synopsis regarding the indigenous groups in Honduras appears to agree with Davidson and Stone regarding the Maya and Pech. He noted that "the Maya were located primarily in far western Honduras" (1984: 115) and that the Pech were "apparently . . . centered along the coast and in northeast Honduras, including the Departments of Colon, Gracias a Dios, and the Bay Islands of Honduras" (1984: 116).
His review of the archaeological research also found evidence in agreement with Davidson's description of a waxing and waning Mesoamerican influence in eastern Honduras that he generally attributed to trade contacts rather than to political domination.

Healy organized his review of Honduran archaeology according to the lower Central American chronology established by the seminar and reported findings in the Northeast region related to Period IV (1000 B.C.--A.D. 500), Period V (A.D. 500--1000), and Period VI (A.D. 1000--1550). He further divided Period IV into Period IVa (1000 B.C.--300 B.C.) and Period IVb (300 B.C.--A.D. 500) and noted that "the first well-dated evidence of human occupation in Honduras falls in Period IVa. Sites dating to this period are found widely and are approximately coeval with the Mesoamerican Early and Middle Preclassic periods" (1984: 124). Healy found substantial evidence for contact between the Northeast region and Mesoamerica during the earliest of these periods. This evidence came from surveys of ceramics recovered from limestone caves "along the northern edge of the Aguan River Valley" in the Department of Colón that are known collectively as the Cuyamel Caves (1984: 129). Healy reported that his 1974 research on these caves found "rather striking similarities to ceramics from other Early Preclassic sites of southern Mesoamerica" (1984: 129). Although the caves contained evidence of use well beyond the A.D. 500 ending date for Period IV, Healy noted that "the most interesting aspect of the Cuyamel pottery is the possible link to the Olmec culture of the Gulf Coast of Mexico" (1984: 129). He concluded that "all we can say at this time is that the caves appear to have been sacred areas for ritual disposal of the dead"
(both primary and secondary burials) and that during Period IVa northeast Honduras was in contact with southern Mesoamerican groups, including the Olmec. The similarity of ceramic forms and decorations suggests a significant connection at this stage” (1984: 129-132).

Healy noted that “Period IVb (300 B.C.-A.D. 500) corresponds approximately to the Late Preclassic and Early Classic periods of Mesoamerica” (1984: 133) and that, across the country, this period shows general continuity and evolution from Period IVa but with some evident changes in cultural complexity. Technological development is indicated along with population increase and site multiplication. One general unifying trait of Period IVb is the introduction and spread of the distinctive Usulutan decorated pottery over a wide area of western, central, and southern Honduras. The absence of Usulutan wares in northeast Honduras at this time probably signals this region’s growing peripheral nature. (Healy 1984: 133)

Specifically concerning the Northeast region, Healy reported that “there is a lengthy time gap between the earlier Cuyamel period (Period IVa) and the more firmly established Selin period (commencing ca. A.D. 300). We have no evidence of aboriginal habitation in this long intervening time span” (1984: 136). Although he noted that “a tripod slab-legged cylinder vessel from an Early Selin context resembles a form common in Mesoamerica during the Early-Middle Classic period and implies contact with external areas (Healy 1978a: 62)” (1984: 136), he also stated that “it appears that linkages between the artifactual complexes of the Northeast region and other parts of Honduras had lessened by Period IVb” (1984: 136). He summarized the situation in the northeast during Period IVb and later:
There was nothing developing here at this early date that can be compared to places like Los Naranjos or Yarumela. Obsidian, present and abundant nearly everywhere at this time, was rare in the Northeast. Additionally, there is a complete lack of a basic Period IVa time marker in the Northeast, as well as the absence of a significant Mesoamerican trade item, Usulutan pottery. Northeast Honduras by A.D. 300 appears to have developed along quite local, and not very Mesoamerican lines. This trend of deviation from the Mesoamerican cultural pattern continues throughout the balance of the pre-Columbian era. (Healy 1984: 137).

During Period V, Healy's Northeast region continued to show very limited contact with Mesoamerica and, particularly by the end of the period, increasing contacts with areas to the south. In terms of Mesoamerican contacts, the Northeast region during Period V was distinctly different from the other areas of Honduras included in Healy's review. He stated that "the general impression of the period is of fairly pronounced Mesoamerican (Mayan) influence in western, central, and southern Honduras until about A.D. 900-1000" (1984: 147) while his analysis of ceramic distributions in the country "shows northeast Honduras having virtually no evidence of contact with the Maya and only traces of trade with Mayoid groups of the Ulua Valley" (1984: 147).

Healy summarized the rather distinctive situation in the Northeast region during Period V:

In northeast Honduras, ceramics, settlement patterns, and burial customs were beginning to take on very non-Mesoamerican characteristics. By Period V (the Basic and Transitional Selin phases) burials still lacked grave offerings, though some residential mounds were now larger than others. However, sites were still nearly uniform in size and fairly small by contrast to contemporary developments in the west. Some sites were fortified. There is also evidence which suggests that by A.D. 800 the Northeast region was receiving substantially different cultural stimuli. Several of these trait changes are obvious forerunners of subsequent Cocal-period features. Unfortunately, our knowledge of the Transitional Selin phase at the end of Period V is based solely upon one site (H-CN-5) which, interestingly, was abandoned about A.D. 1000. (Healy 1984: 148)
During the last five hundred years before Contact, northeastern Honduras continued to evidence itself as distinctive from the rest of the country and Mesoamerica in general, although, as Davidson (1974: 30) noted, there is also evidence of resumed contact with Mesoamerica as well. Healy explained that

The last major pre-Columbian era, Period VI, is approximately equivalent to the Postclassic period of Mesoamerica. It was a time characterized by a considerable population drop and widespread site abandonment in western and central Honduras during the first half of the period. . . . In northeast Honduras, numerous changes also occurred, suggesting a major cultural realignment. (Healy 1984: 148)

He also reported that this most recent period is divided into two archaeological phases in northeastern Honduras such that, “in the Northeast region, Period VI is defined by the Early and Late Cocal phases (A.D. 1000-14000 and A.D. 1400-1530 respectively)” (1984: 152).

The characteristics of ceramics recovered from the period provided evidence of both the divergent nature of this part of Honduras as well as some possible contact with Mesoamerica. Healy reported:

Pottery of the Cocal period on both the mainland and Bay Islands is characterized by incised lines and punctuations (fig. 6.17). . . . The ceramic is quite unlike that of Period VI elsewhere in Honduras or Mesoamerica proper. Some general similarities to the pottery of eastern Nicaragua, Costa Rica, and Panama are discernible in design and mode of adornment.

Practically the only painted pottery attributable to the Early Cocal period is Bay Island Polychrome (Strong 1935). . . . Clearly, then, this polychrome falls into the first half of Period VI, and its contextual associations hint at a Mesoamerican derivation (fig. 6.18). (Healy 1984: 153-155)
Other artifacts also indicated that northeastern Honduras had contact with Mesoamerica, but the region did not appear to Healy to be dominated in any sense by Mesoamerican cultures:

By and large, the Northeast region in Period VI shows significant changes from the preceding Selin times. As noted above, the pottery looks basically non-Mesoamerican. The Cocal period propensity for elaborate stone carving, especially legged metates and cruder sculptures, along with the overall ceramic pattern, points to more likely cultural affinities southward.

By contrast, some other traits of this date are more Mesoamerican: ladle censers, copper bells, ceramic cylinder stamps, obsidian, copper, and plumbate pottery are probably imported from Mesoamerica. It seems, then, that the Northeast region was becoming more receptive by Period VI to contacts and influences from both its southern and northern neighbors. ... Although the basic regional culture in Period VI may have been non-Mesoamerican in foundation, it was obviously in contact with the north. (Healy 1984: 155-156)

Healy summarized the distinctive, non-Mesoamerican nature of northeastern Honduras during the period prior to Contact, although he found it impossible to specify the source of its distinctive traits:

In the Northeast, we see the appearance of pottery termed the North Coast Appliqué Style with incised and punctate decoration. This is totally unlike anything else in Mesoamerica proper. Disposal of the dead, judging from the Bay Islands data, is also distinctive. Unfortunately, a lack of data from the Atlantic side of Nicaragua makes it difficult to ascertain if the Period VI (Cocal) ceramics of the Northeast region are local in origin or, as several writers have suggested, “intrusive” from farther south. What is apparent from recent work in the Northeast is that the problems which severely affected the rest of Honduras in the first half of Period VI did not seem significant to the Northeast. Indeed, is some ways Early Cocal seems a time of marked regional prosperity, increased population, and expansion. (Healy 1984: 157-158)

In his concluding section, as Healy raised questions for future research concerning the nature of the Mesoamerican Frontier and the relationships between various parts of Honduras and Mesoamerica, he succinctly reiterated the distinctive lack
of apparent control of northeastern Honduras by Mesoamericans throughout the periods reviewed:

It would seem, based upon ethnohistoric, linguistic, and our own archaeological work in the Northeast region, that at least part of the north coast of Honduras lay outside the Mesoamerican culture area during the prehistoric area. Unlike other parts of Honduras, this region never received Usulutan or true Classic Maya pottery, nor did it adopt stepped pyramids, ball courts, Mesoamerican deities, or other traditional hallmarks (Kirchhoff 1943). Unfortunately, the critical area between the Sula Plain of western Honduras and Trujillo in the northeast remains basically unexplored. Similarly unknown is the vast zone east of Colon and into Atlantic Nicaragua, an area which might help tie the Northeast region of Honduras to the southern zone of lower Central America (Baudez 1970). (Healy 1984: 159)

The archaeological evidence reviewed by Healy (1984) and Davidson (1974, 1991) and the ethnohistorical and linguistic evidence presented by Davidson (1974, 1991) then, provide a preponderance of evidence in support of the pre-Columbian Pech, and not Maya, occupation of the Bay Islands and the adjacent mainland. The limited coverage of archaeological research in the area did not allow Healy to specifically address the possibility of Maya occupation of coastal areas around and west of Trujillo, as suggested by Stone and Chapman. His exclusion of the Northeast region, which he defined as including “the Departments of Colon and Islas de la Bahia” (1984: 120), from “the Mesoamerican culture area” (1984: 159), however, indicates that he saw no Mayan control over the coastlands at least as far eastward as the Atlántida-Colón border. Davidson used historical references to delimit specifically the coastlands west of Trujillo for the Pech and not the Maya.

In addition to the claims of Maya occupation and control of the islands and coastal portions of the early Pech region, the presence of foreigners from central Mexico
has also been noted in the interior of the Contact-era Pech region. There is more acceptance on the part of scholars of the presence of these Nahua peoples in northeastern Honduras at Contact than appears to be the case with the proposed Bay Island Maya. As in the case of the Maya, however, there is also uncertainty and disagreement as to the role of the Nahua settlements in the area as well as the extent of territory that may have been under Nahua control.

Central Mexican peoples apparently migrated to Honduras, and other parts of Central America, at various times and for a variety of reasons. Mason described some of the mechanisms of establishment of central Mexican language enclaves in Central America, both before and after Contact, while discussing his Utaztecan language family:

The break-up of the Toltec “Empire” about the year 1000, the Aztec custom of establishing colonies for trade and control of subjugated peoples, and the similar Spanish practice with friendly colonists, especially the Tlaxcaltecs, spread Nahuatl groups all over Middle America, often supplanting more autochthonous languages. (Mason 1940: 69)

Weaver (1981: 476-477) also recognized the role of upheavals in central Mexico, such as “the break up of Teotihuacan and Tula,” as possible motivations for early migrations of some Toltecs, later known as Pipils, to Central America. In her description of the pre-Hispanic Tol Indians, Chapman (1992: 14) placed the Pipil migrations to “Central Honduras during the seventh and eighth centuries A.D.” and identified later central Mexican arrivals in the forms of Pochteca traders “shortly before the Spanish Conquest” and of “auxiliaries of the Spanish conquistadores” around 1525. Newson also noted two pre-Hispanic waves of central Mexican migration to Honduras. She reported that “the
Pipil probably arrived during the ninth and tenth centuries AD... whilst Aztec traders began to establish colonies in the area between the fourteenth and sixteenth centuries.”

Many writers have accepted the existence of Nahua settlements in the vicinity of Trujillo based upon the accounts of Cortés’ expedition to Honduras. Stone presented her view of these settlements:

There appears also to have been two very important Mexican colonies in the vicinity of Trujillo, that of Chapagua and that of Papayeca. These names are still to be found as regions or creeks in the same neighborhood on modern maps of Honduras. According to the account of Cortés, the people of both Chapagua and of Papayeca spoke a dialect practically identical with that of Mexico City. These towns were most probably the great trading centers of the eastern north coast, commanding as they did the approaches from the back country to the sea. Cortés brings out clearly the power of these Mexican colonies when he describes the towns and chieftains subject to them. (Stone 1941: 15-16)

Stone also reported references found in the histories of Vázquez (1714-1716) and Juarros (1808-1818) that she interpreted as indications of the early presence of “Mexicans in the region of Olancho” (1941: 15), that is, in the interior of the Pech region.

Chapman (1958: 48, 52; 1992: 14) has reported the pre-Columbian presence of central Mexicans both on the north coast as well as in the more often mentioned settlements just inland from Trujillo. In her earlier work, she noted that “Cortés’ Fifth Letter is the principal source telling of the existence of the Nahua provinces of Papayeca and Chapagua south of Trujillo” (1958: 49) and provided a description of the sites:

“Mexican” inhabitants of the provinces of Chapagua and Papayeca just south of Trujillo may also have engaged in long distance trading. However, these provinces do not seem to have constituted “ports of trade” in the sense of being colonies of long distance traders, but appear rather to have been peopled by descendants of the Nahua Pipiles who migrated south from the Valley of Mexico around the time...
of the "fall" of the Toltec Empire in about the twelfth century A.D. (Chapman 1958: 114-115)

In her later writing, she mentioned other, more recent, possible origins of Mexicans in the vicinity of Trujillo. She noted that

Like the Yucatecan merchants, the Pochteca also had a port of trade farther down the Atlantic coast in Trujillo in Jicaque territory. And by 1525 there were other "Mexican" communities, sometimes called "enclaves," in Honduras founded by Aztec warriors, auxiliaries of the Spanish conquistadores, namely Hernán Cortés and Bernal Díaz del Castillo, during their famous expedition to "Hibueras." (Chapman 1992: 14)

She did not here specifically identify the ethnicity of the residents of Chapagua and Papayeca as other than Pipil but her recognition of Pochteca activity in Trujillo, an area that she earlier had failed to include among the Aztec ports of trade along the Caribbean coast (1958: 114), implies that she may have changed her opinion somewhat regarding the ethnicity and the primary activities of the pre-Columbian Mexican residents of northeastern Honduras.

Newson also considered the accounts of Mexicans in Honduras in her review. From Cortés' letters and a later document, she believed that the inhabitants of Papayeca and Chapagua were Pipil:

Other descendants of early Pipil migrants were probably living near Trujillo at Papayeca and Chapagua. These towns had eighteen and ten villages respectively under their jurisdictions and their inhabitants spoke to Cortés and his representatives in Cula, which was described as almost the same as Mexican, but with a slightly different pronunciation and vocabulary. In addition, later in the sixteenth century the Bishop of Honduras sent some "indios naguatatos" with some other caciques from around Trujillo to the surrounding hills in order to persuade Indians who had taken refuge there to return to their villages. These accounts suggest that the dialect spoken by some Indians in the vicinity of Trujillo was Nahuat. (Newson 1986: 32)
Concerning the reports of Mexicans in Olancho, she wrote:

Apart from Naco, there is some evidence to suggest that Aztec traders may have established colonies in Honduras at Comayagua, Agalteca, Olancho, and Tegucigalpa, but it is inconclusive. . . . Historical evidence from the seventeenth century suggests that Mexicans were living in the Olancho valley. Vázquez relates that Fr. Verdelete and Fr. Monteagudo on a missionary expedition to the Olancho valley met Lencas and Mexicans living together, and that the Mexicans conducted wars with the Taguacas. (Newson 1986: 34)

Of course, if one accepts Chapman's (1978: 19) proposal that the Lenca did not arrive in the Olancho Valley until the sixteenth century after the arrival of the Spaniards, it might be reasonable to also suppose a later arrival of the Aztecs in the region.

While a major point his 1991 article was the delimitation of a sixteenth century Pech culture area that extended from the Bay Islands to the Olancho Valley and almost 100 kilometers along the coast on either side of Trujillo, Davidson admitted that “this Pech area probably contained alien enclaves. Apparently, two Mexican-dominated settlements with their subjugated Pech towns occupied the lower Aguán Valley south and east of Trujillo” (1991: 212). He further made specific mention of the same two settlements, and the same evidence for their Mexican connection, that others have noted. As he reviewed the linguistic evidence for ethnic identification of the native inhabitants of this area in the historical documents, he noted that “apparently, Nahuatl toponyms, such as Chapagua and Papayeca (Cortés 1971: 265), seem to have referred to the relatively large Mexican-led settlements in the lower Aguán valley. The names of their chiefs, also given to us in Mexican, support that notion” (1991: 212).

Healy included the Trujillo area Mexican settlements in his description of the distribution of the Pipil in Honduras. He noted that “at least two significant enclaves are
known from contact-period descriptions in Honduras; the site of Naco in northwest Honduras and the sites of Papayeca and Chapagua in northeast Honduras (Stone 1941: 15-16; Healy 1976a; Henderson 1977b). The general belief is that these are late Central Mexican intrusions established principally for trading purposes" (1984: 116). Like other writers, Healy noted the historical source of information concerning these sites when he stated that “Cortes trekked to the Northeast region of Honduras and found Nahua speakers at several chieftain sites (Papayeca and Chapagua) dominating the region” (1984: 156). In spite of his recognition that the “general belief” considers these sites to be trading centers, Healy apparently felt that their role was worthy of further investigation. In his concluding section, as Healy raised questions for future research he presented the uncertain nature of the Nahua settlements in northeastern Honduras as a topic in need of clarification:

Was exchange through itinerant trading groups, like the Aztec pochteca, the means by which Olmec pottery, obsidian, plumbate ware, and copper bells (to mention but a few items) came as far east as the Aguan Valley of Colon? If so, what routes (overland or by sea) were followed? What was being exchanged for these Mesoamerican-made products? Or, were the so-called Pipil enclaves known from Period VI less benign outposts of foreigners on Honduran soils? Were these garrisons of Nahua-speaking peoples part of the Postclassic Mexican expansion? (Healy 1984: 159)

In his chapter summarizing “the current knowledge and thinking on the pre-Columbian archaeology of . . . lower Central America” (1984: 341) as derived from both the papers and discussions of the 1980 advanced seminar on lower Central American archaeology, Gordon R. Willey also touched briefly on the nature and role of the Mexican settlements in the socio-political system of northeastern Honduras. In the
context of reviewing the collective data to explore "the processes by which foreign or outside influences may bring about social and political change in the receiving society" (1984: 366-367), he noted that in northeastern Honduras, "after A.D. 1000, the data of both archaeology and history reveal a system of chiefs and paramount chiefs in a complex political hierarchy. Papayeca was one such important capital, and it was tied in to a Mexican-originated trading network" (1984: 368). The important position of Papayeca, it was then proposed, could have been a result of the social and political evolution of a primarily local group which was stimulated by contact with the more advanced Mexican societies rather than simply imposed or transplanted from the foreign centers of power. Willey explained the process of social and political development resulting from trade contacts between the culture areas as envisioned by the seminar participants:

Socio-political systems, in competition and cooperation with other systems, will often adapt to effect a better articulation with more successful systems. Thus, they may become more state-like in the handling of goods and information and in the exercise of authority than previously. In this way, a society like that of Papayeca in northeast Honduras develops toward the norms of statehood as a result of its Mexican ties. These ties, in the beginning, may have been altogether commercial, but it is likely that other types of exchange also come into being if the contact is maintained over any period of time. Actual Mexicans may have held some posts of authority within the Papayecan community; but this need not indicate that the town is either a colony or a conquered province ruled in all matters from distant centers in Mexico. (Willey 1984: 368)

Although Healy himself (1984: 157) held out the possibility that Papayeca and Chapagua could have been colonial outposts, the proposal of a more local development of higher levels of social organization through commercial and cultural contacts with Mexico that evolved from the seminar discussions suggests an even more limited
Mexican presence within the early Pech region than heretofore considered by researchers concerned with delimiting the Contact era culture regions on northeastern Honduras.

At the other extreme, at least one scholar has argued for an expanded conception of Mexican presence and influence in pre-Columbian northeastern Honduras. Based upon her “analysis of the indigenous settlement pattern and reigning sociopolitical organization at the moment of contact” (1991:230), the Honduran historian Gloria Lara Pinto believed that the evidence did not support the extension of a continental Pech area into the Agalta and Olancho valleys nor into the Aguan Valley, as has been deduced from comparative archaeological data at the beginning of the sixteenth century (Stone 1975:39-42). The ethnohistoric sources at my disposal suggest an ethnic and linguistic definition slightly different for this territory. In this context, the Nahua “colonies” recognized earlier by others (Fowler 1983:359-363; Reyes Mazzoni 1974:19-31; Richter 1971:77-79; Stone 1975:15) played a more important role and reached a greater expansion than previously believed (Lara Pinto 1980:72-76). (Lara Pinto 1991:230)

In contrasting her northeastern Honduras ethnohistoric reconstructions with Davidson’s. Lara Pinto (1991:231) proposed a Nahua-influenced region that includes “the Aguan, Agalta, and Olancho valleys in the sixteenth century.” She further explained, “I do not necessarily exclude the Pech (or speakers of another language) from this setting in the sixteenth century, but I do argue for Nahua control of the bottomlands in these valleys. By extension, I am urging at the same time a reconsideration of the origins of the archaeological remains now credited to the Pech” (1991:231).

Lara Pinto’s interpretation of the historical documentation led her to believe that there was a substantial Nahua presence, and concomitant control of territory, in several large river valleys of interior eastern Honduras. These valleys, the Aguan, Agalta, and
Olancho, lie at the western edge of colonial Taguzgalpa. Although she proposed that the valleys were under the control of Nahuas at the time of Contact, these enclaves of higher civilization did not survive the Conquest, as did some of the less advanced groups of eastern Honduras. Lara Pinto stated that in the eight years from 1525 to 1533 “the indigenous populations in the Aguán, Agalta, and Olancho valleys were decimated, and, at least in the Aguán, the sociopolitical structure had been radically weakened” (1991: 235-236). She proposed, nevertheless, that the Nahua culture survived, at least in the Agalta Valley, until after the middle of the sixteenth century. Spanish priests were sent to convert the Nahuas of the Agalta, then known as Taicones, in 1561 and “shortly thereafter, the Taicones disappeared as their numbers dwindled . . . , Catholicism overcame native religion, and neighboring indigenous groups offered better alternatives for survival” (1991: 237).

Lara Pinto’s proposal for Nahua control of the large river valley bottomlands, and her delimitation of a somewhat larger area of Nahua influence stretching from the Bay Islands to the Olancho Valley, is substantially at odds with most other writers’ conception of the pre-Columbian situation. The other scholars have reported historical references to Mexicans living in Olancho and near Trujillo, some of which may have referred to post-Contact arrivals or, simply have been mistaken identifications. Willey’s (1984: 368) summary of current thought concerning the two most often mentioned Mexican settlements near Trujillo provides another possible explanation wherein some political, economic, social and cultural patterns may have diffused from Mexico via trade.
relationships without an actual extension of political control or the mass migration of Mexicans.

**Conclusion: Comparisons and Combinations**

The many efforts at delimiting the culture regions of Native American groups within the territory of modern Honduras for the time period ranging from Contact to about A.D. 1800 which have been reviewed here are not sufficient to provide an unquestionably exact delimitation of the Contact and Colonial Pech region. The Pech region delimitations themselves are contradictory in certain respects and the neighboring region delimitations are not only contradictory, but, except for the smallest scale maps in which the unknown territory was divided arbitrarily between the various groups, their combined coverage leaves important areas to the east and south of the Pech region for which the early indigenous inhabitants are unaccounted. A consideration of the picture presented by the combined delimitations is important, however, to identify areas of agreement and contradiction between the various scholars to establish what is known, or at least agreed upon, and where gaps in our knowledge still exist.

In terms of where the Pech were not, that is, the lands occupied by neighboring groups, the delimitations of Davidson on the Tol and the Pech, Davidson and Cruz on the Tawahka Sumu, Chapman on the Tol and Lenca, and West on the Lenca represent efforts that considered the data relevant to one group to interpret a probable territory inhabited by that group (Figure 6). The smaller scale maps of Stone and Johnson, on the other hand, considered a number of groups over a larger area and, in effect, divided the territory among the available indigenous groups. On these maps, the boundaries of
Figure 6. Delimitations of the early Lenca, Tol, Pech, and Sumu regions.
one group ends where those of another begins and the ambiguity inherent in many of the
delimitations is obscured. Comparison of the group specific delimitations, even in
separate works by the same author, highlight the difficulty of identifying border lines that
do not overlap yet encompass all of the available territory.

The delimitations of specific culture regions, although not without some areas of
conflict with the various Pech delimitations, do provide a general view of the limitations
of the possible early Pech region. Chapman’s and Davidson’s Tol delimitations each
include what was probably the core of the early Tol region, although Chapman’s region
extends farther eastward along the coast than does Davidson’s, which represented the
yet unconquered Tol lands in A.D. 1700. Chapman’s and West’s Lenca regions likewise
circumscribe a similar core area for that group, with West’s toponymic region extending
farther eastward toward, but only barely overlapping, the proposed Pech regions.
Davidson and Cruz’s Honduran Tawahka region finds no comparison in the literature,
but Incer’s Nicaraguan Sumu region supports their delimitation, at least along the
international border. Their Tawahka region overlaps slightly those Pech region
delimitations that take the Río Patuca as the southeastern boundary of the Pech region.

Lara Pinto’s proposed Nahua territories present the greatest conflicting claims
against the various proposed Pech regions, both because they represent large enclaves
that perforate the interior of the Pech regions and because they greatly elevate the socio-
political role of this group beyond that heretofore recognized by other researchers. It
remains to be seen whether her views will find widespread acceptance among other
scholars but, for now, such a radical reinterpretation of the early conditions of the region
seems difficult to incorporate into the present work. This evaluation will favor the interpretation presented by Willey of a more limited Nahua presence in eastern Honduras.

The delimitations for these three groups, while more detailed, support the generalizations found on Johnson's map that seem to be agreed upon by most authors that the pre-Columbian Pech occupied lands in northeastern Honduras and were bordered on the west by the Tol, on the southwest by the Lenca, and on the southeast by the Sumu. South of the Pech region, lying between the delimitations for the Lenca and the Tawahka Sumu, is an area of southern Honduras that is not covered by any of these delimitations. Johnson simply included this area within his Lenca and Sumu regions. Stone included part of this region as Ulva territory and others have reported a possible Matagalpa presence in Danli, which falls within the unclassified area. East of the Tawahka Sumu region, the Mosquito Lowlands are another part of eastern Honduras that is left unclaimed by the Tol, Lenca, and Sumu delimitations. Conzemius and Chapman, of course, both claimed that the Pech occupied much of this territory prior to Contact. Johnson and Stone each delimited this area as part of the Miskito region, although the Miskito had not emerged as an identifiable group at that time. If the Honduran Mosquitia was inhabited by the native ancestors of the Miskito at Contact, the early Honduran Sumu region would be greatly expanded beyond Davidson and Cruz's Tawahka Sumu delimitation.

The presence of other native groups surrounding the Pech, as established by scholars of those groups, provide vague limits on the possible extent of the early Pech
region. As has been seen, however, our best estimates at the extent of those neighboring
distributions show some conflicts with the proposed early Pech region delimitations and
leave some territories bordering the proposed Pech regions unaccounted for. We can
now compare the various Pech delimitations to examine how they conflict with one
another as well as with the delimitations for neighboring groups.

A discussion of the comparison of the various delimitations presented in the
previous section demands some standardization of terminology and subclassification of
the region. The various authors refer to similar portions of the Pech region boundaries
with differing geographic or cardinal direction terminology. This is a result, no doubt, of
the rather difficult-to-categorize morphology of both Honduras and the Pech region
within it. Both share a somewhat triangular morphology that writers seem to find
difficult to describe using only, as they seem wont to do, the four cardinal directions.
For example, the Pech border nearest to the Río Patuca and the Honduran border with
Nicaragua along the Río Coco are called variously the southern or eastern border of their
respective regions. For convenience in a critical analysis, we must also compare the
various Pech region delimitations for one section at a time rather than as a whole.

Comparison and evaluation of the delimitations will therefore be considered according to
four subregions corresponding to the, western border, the Bay Islands and north coast,
and the southeastern border.

We will consider the Pech region delimitations proposed by Conzemius, Johnson,
Chapman, and Stone primarily in comparison with that proposed by Davidson, which is
taken to be the most authoritative. The interruption of unassigned territory
corresponding to the upland areas of Montaña de Botaderos and Montaña La Mora resulting from Davidson’s strict positive delimitation has here been incorporated into the larger Pech region. The lack of evidence prevented him from including this prorupt within his delimitation but, similarly, the apparent lack of evidence supporting the occupation of this zone by other peoples makes it reasonable to assume that it, like the territories immediately to the north and south, was inhabited, or at least utilized, by the Pech.

Although Davidson’s region extends much farther westward than most of those previously reviewed, a comparison of this most recent delimitation with the details of the explanations of previous authors shows less specific disagreement than might be expected from simple cartographic comparison, particularly regarding his western boundary south of the Río Aguán. The territory north of the Aguán that Davidson claims for the Pech finds more explicit contradiction, although the contradictory claims are little supported by evidence. Conzemius’ only explanation for his placement of the western limits of Pech territory stated that “probablemente no se han extendido los Payas por el interior más allá del grado 86° al Oeste de Greenwich, donde confinaban con las tribus lenças, sumus y matagalpas, como demuestran los nombres geográficos de esa región” (1928: 2) and Johnson (1940: 113) followed Conzemius’ work in his own delimitation, adding that “the only [location] that seems certain is the western boundary on the north coast, the Aguán River. . . .” In light of subsequent research, however, Conzemius’ location of this proposed toponymic boundary has proven problematic on several counts. He did not mention the Tol as one of the neighboring native groups.
although they are now believed to have bordered the Pech to the west. Robert West's 1957 delimitation of the distribution of Lenca toponyms did not include any territory as far east as 86°W nor even any territory overlapping Davidson's or Chapman's more westerly delimitations. Finally, the archaeological reports reviewed by Davidson clearly extend the limits of "Paya" artifact distribution beyond the 86°W limit which Conzemius established on the basis of his study of the place name distributions.

While Chapman's 1958 discussion of native distributions included a description of the combined territory that she believed to have been inhabited by both the Pech and the Tol, the only point that she specified along the border between the two groups was "the mouth of the Aguán River" (1958: 53). In later work published after further research on the Tol, however, she both gave a more detailed delimitation and moved the northern point of boundary between the Pech and their western neighbors from the mouth of the Aguán to Trujillo. She determined that the territory of the Tol at Contact and during the sixteenth century "extended east along the Atlantic coast to the present town of Trujillo, site of the Pochteca port of trade, and inland to the Aguán River and the limits of the Department of Olancho, which was Paya territory" (1992: 15). Her identification of the modern Olancho border as the limit of Tol distribution seems to represent a slight westward shift from her opinion in 1958, but was still consistent with her earlier belief (1958: 45) that the Tol "area included all of the present-day departments of Atlántida and Yoro..." In the area closest to the north coast, then, and assuming that she does not intend to claim the entire territory between Trujillo and the mouth of the Aguán for the Pochteca, this delimitation agrees more with Stone's 1966...
region than with Conzemius or Davidson. Such a delimitation also does not limit
Davidson’s western border south of her Río Aguán-northeastern Olancho segment. In
fact, within Olancho, Chapman’s Pech region extends farther westward than does
Davidson’s and is the only proposed region here reviewed to do so. Her interpretation
of the historical documents does, however, claim the lands north of the river and west of
Trujillo for the Tol.

Stone’s 1966 Pech region delimitation also reaches farther westward than do
those of Conzemius and Johnson but not as far as that of Davidson. South of the Río
Aguán, she contradicts Davidson only in the area of the Olancho Valley, which she
believed to have been inhabited by the Lenca (1941: 12-14) or, at least, “border country
where Paya and Lenca met” (1941: 52). She includes the land north of the lower Río
Aguán, from about the longitude of Trujillo to its mouth, within the Pech region. Her
western limit north of the river is apparently based upon her 1941 interpretation of the
historical documents relating to the provinces of Maia and Taia and, somewhat, upon the
extent of archaeological surveys at the time of her writing. Curiously, however, she
failed to extend the Pech boundary westward along the Aguán as far as “the vicinity of
Olanchito,” where Paya artifacts were found, much less to the “headwaters of the Aguán
River,” which she proposed as a possible limit of Paya artifact distribution (1941: 52). It
is precisely in the vicinity of Olanchito that Davidson’s Pech region boundary crosses the
Aguán. The eastern limits of the Tol region do not explicitly play a determining role in
Stone’s delimitation as the entire territory to the west of the Pech was outside of her
1966 consideration and therefore left blank on the map and not assigned to any particular
native group. Her 1966 delimitation does not, then, present evidence to contradict Davidson’s westward extension of the early Pech region and her 1941 work contradicts him only in the Olancho Valley and north of the Río Aguan. Stone’s 1966 delimitation, in fact, contradicts her own 1941 work by including the Olancho Valley entirely within the Pech region and by failing to extend the Pech region westward along the Aguan at least as far as Olanchito.

From the descriptions in these previous works it can be seen that only Conzemius’ claim of a toponymic boundary, which seems to have been based upon confused or incomplete evidence, and Stone’s 1941 Olancho Valley transition zone directly contradict Davidson’s proposed westward expansion of the Pech region south of the Río Aguan. Conzemius, Johnson, and Chapman’s 1958 work each contradict his claim that the lands north of the Aguan were Pech with each locating the northern limits of early Pech distribution along that river. Chapman, of course, later amended her description to include the lands between Trujillo and the mouth of the Aguan within, it is assumed, the Pech region. Conzemius, and perhaps Chapman’s earlier work, seemed to base this conflicting delimitation upon the indications in the early documents that Mesoamericans were encountered near Trujillo, in conjunction with their interpretations of the mainland culture region configuration at the time of Columbus’ 1502 voyage.

That Mesoamericans were living near Trujillo is largely accepted but the amount of territory that they occupied is still debated. A limited Mesoamerican presence in the Trujillo region does not necessarily rule out a simultaneous, and wider, Pech occupation, but if the ethnohistoric documentation is interpreted as excluding the Pech from the Bay
Islands and extending the Pech region eastward along the coast beyond Río Negro, the exclusion of the Pech from the territory north of the Río Aguán becomes more plausible. As discussed previously, Conzemius (1928: 1-2) believed that the inhabitants of the Bay Islands were Mayans. He also recognized a Mexican presence in the immediate vicinity of Trujillo (1928: 23). Chapman’s 1958 work also noted indications of Mesoamerican presence in the area. She stated that

Cortés’ Fifth Letter is the principal source telling of the existence of the Nahua provinces of Papayeca and Chapagua south of Trujillo. However, there is little agreement among the specialists concerning the identity of the inhabitants of the Bay Islands and the adjacent mainland in the vicinity of Trujillo at Point of Caxinas, or Guaimoreto Lagoon, as it was variously called. Some believe this area was occupied by Jicaque, others contend that the Paya lived there, and elsewhere it appears that the Yucatecan Maya had established a trading post there. It seems to this writer that the weight of evidence supports the last hypothesis and, inconclusively, that either the Jicaque or Paya also may have lived there. (Chapman 1958: 49)

Chapman accepted a Maya occupation of the Bay Islands and the north coast at Trujillo largely because of accounts of a trading canoe, which she interpreted to be Mayan, encountered by Columbus at Guanaja and because of Lothrop’s determination that a Maya province occupied the mainland south of Guanaja (1958: 50-51). She also cited Ferdinand Columbus’ account that the 1502 explorers’ Bay Island translator could not converse with the Indians, which Chapman believed to have been Payas, that they encountered at the Río Negro mouth as evidence that the Bay Islanders were not Pech (1958: 51). This makes sense in light of her belief that the mouth of the Río Negro was within the Pech region, but much less so under the view that the Negro marked a cultural border between the Pech and their eastern neighbors, as proposed by both Stone and
Davidson. Within an ethnohistoric paradigm that views the Bay Islands as part of a unified Pech region that extended eastward along the coast only as far as the Río Negro, the inclusion of lands north of the Río Aguán within the Pech region not only makes more sense but also seems to be an almost necessary interpretation of the historical accounts.

Stone's and Chapman's (in her later description) delimitations of the Pech' western boundary north of the Aguán to about the longitude of Trujillo would also have been based upon ethnohistorical interpretation, particularly concerning the placement of the border between the indigenous regions of Maia and Taia. Both authors noted Lothrop's use of the Probanzas of Diego Columbus to associate "a land called Maya" with the area of Punta Caxinas (Chapman 1958: 49; Stone 1941: 14). Stone (1941: 9) further related Lothrop's identification from Martyr's accounts of a cultural border in the area between two regions called Maia and Taia. She believed that the two regions represented areas of Maya, together possibly with Tol, and Paya control, respectively, and that the border between them was probably located near Punta Caxinas and Trujillo (1941: 9, 15).

If the Maia-Taia border is accepted as the Tol-Pech border and Lothrop's report is accepted as a firm indication of its location, then delimiting Trujillo as the western limit of the Pech makes sense. Davidson, apparently accepting the former premise but not the later, however, placed the Pech-Tol boundary on the north coast farther west, at the Río Cangrejo. In addition to his use of the Trujillo encomienda boundaries to establish this more westerly limit, Davidson hinted at another piece of evidence whose
reinterpretation would cause Martyr's account to agree more with his delimitation than Stone's and Chapman's when he suggested that "from close inspection of all the primary evidence, one could also conclude that Roatán Island, and not Guanaja, was the island visited by Columbus" (1991: 207). The location of the cultural border ten miles west from Roatán, rather than from Guanaja, would more closely approximate the Cangrejo site than Caxinas. Stone stated that there is no linguistic evidence placing the Maya at Trujillo and the Maya-related artifacts found near Trujillo, and mentioned by Stone, could have been the result of trade with distant Maya regions. Davidson does not provide evidence to contradict the Probanzas statements.

As we have seen in the case of Davidson's western border of the Pech region, there is also little evidence in the previous descriptions to directly contradict his placement of the southeastern border farther westward than it has been by the prior authors. Each of the delimitations previously considered place this border of the Pech region along the Río Pataca for most of its length. Davidson locates it somewhat northwest of that river, based primarily upon the limits of the archaeological surveys that he reviewed. It was noted above that Johnson found much contradiction and geographic confusion regarding the southeastern limit of the early Pech region in the works upon which his map was based. This was due in part to discrepancies between the written descriptions which identified this boundary "as Cabo Gracias a Dios or the Wanks River" and the cartographic delimitations which on "all maps draw the boundary at the Patuka River" (1940: 113-114). Johnson accepted the Pataca as the southeastern boundary on his map on the basis of the previous map delimitations. Conzemius placed the
southeastern limit in the interior at about the Río Patuca but left open the possibility that they may have occupied lands between the Patuca and the Río Coco. He stated that

El límite oriental de los Payas desde varios siglos al menos es el río Patuca, con excepción de la región costanera que ellos ocupaban antes hasta la inmediación del Cabo Gracias a Dios, y no tenemos pruebas algunas demostrando que antes se hayan extendido estos indios en territorio que hoy es nicaragüense. (1928: 2-3)

Conzemius does not specify in his 1928 work how he determined that the Patuca did indeed mark the southeastern limit of early Pech distribution although he does declare that there is no evidence to support the extension of their region into Nicaragua. In his 1932 work on the Miskito and Sumu, he again identified the Patuca as a rough boundary between the Pech and Sumu when he noted parenthetically that the Indians living along the river were either “Sumu or Paya” (1932: 10).

Chapman identified the Ríos Sulaco and Guayape as the southern boundary of a combined Tol and Pech Contact region (1958: 36). The Guayape, of course, becomes the Patuca after its confluence with the Guayambre and Chapman claimed that the Tawahkas living along the Patuca were Pech (1958: 52). She therefore intended for the Patuca proper to also approximate the Pech’ southeastern border. Her extension of the region to the southeast as far as the Patuca, however, appears to have been based upon the misidentification of the Tawahka as Pech rather than as the Sumu people that they are now known to be. Although her southeastern border as described does contradict Davidson’s southeastern delimitation, the only evidence that she provides in support of her contention is no longer valid. Indeed, in light of the proper classification of the Tawahka as Sumu, her evidence tends to lend support to Davidson’s delimitation, or, at
very least, provides no direct contradiction to his movement of the boundary away from the Río Patuca.

Like the other delimitations here reviewed, Stone’s 1966 work provides no concrete evidence for the placement of the southeastern Pech boundary at the Río Patuca. Her description and delimitation recognized the Patuca as a border between the Pech and the Tawahka but she does not state how she arrived at that placement. From the writings of Vásquez, she believed that the area north of the Prinzapolka river system in Nicaragua, including, and perhaps primarily, eastern Honduras, appeared to have been the homeland of the Tawahkas (1966: 212). She provides no other evidence for her delimitation of the southeastern boundary in this work. In her 1941 piece, upon which she undoubtedly drew for the later delimitation, however, she provides some clues to her determination. She stated that “we can in part agree with Squier when he writes: ‘The names Xicaques and Payas may be regarded as general designations. The Toacas or Towkas, some of whom live on the banks of the Río Patuca, and the Secos, found on Río Tinto, or Black River, probably belong to the Payas...’” (Squier 1855: 224 in Stone 1941: 9). It is not clear whether she here disagrees with Squier on the count that Paya was a general designation or that the Tawahkas were Pech. If she, like Chapman, intended to agree, incorrectly, that the Tawahkas of the Patuca were Pech then she would certainly have had cause to delimit the southeastern boundary at least as far as that river. She later indicated that she certainly considered Squire’s designation as a possibility when she stated that “we have noted already that E. G. Squier places a probable member of the Paya tribe on the Patuca. The Patuca fundamentally is the same
river as the Guayape, so it is not impossible that the Paya also lived at various points along this river" (1941: 10).

In terms of archaeological evidence supporting her placement of the southeastern boundary of the early Pech region, Stone’s 1941 work provides little, and what is presented is somewhat confusing. Under her section on “Paya Archaeological Remains” in the “Patuca Valley” she first discusses the artifacts found in a cave near Jamasquiri, which, she explained “was either a burial cave or an offertory similar to that which we shall examine later on a tributary of the Rio Tinto at Peroles Calientes” (1941: 24). She noted the similarities in the pottery artifacts of the Jamasquiri cave and those of Peroles Calientes which, as part of her “Black River section... was Paya-speaking in pre-Conquest times” (1941: 25). She therefore saw reason to associate the Jamasquiri cave with the Pech. Stone’s description of the geographic location of the cave site, however, neither directly supports an extension of the Pech boundary to the Patuca nor contradicts Davidson’s delimitation. She stated that

One of the lesser tributaries [of the Patuca] is the creek of Jamasquiri which meets the Patuca through the Guampu River.

The creek of Jamasquiri is about 3 or 4 leagues from Catacamos [sic], which in turn is about 12 or 14 leagues from Culmí. Near the spot where the creek of Jamasquiri leaves the hills to enter the plain, is a group of houses also known as Jamasquiri. Back about 2 or 3 kilometers from these houses is a cave in which were found about a hundred pottery vessels. (Stone 1941: 22-24)

If the Jamasquiri were a tributary of the Wampú, the argument might still hold but, in fact, the creek is a tributary of the Río Talgua which, in turn, flows into the Guayape near Catacamas and prior to its confluence with the Guayambre. The actual location of the cave, then, lies north of the Guayape and within Davidson’s own delimitation of the
limits of Pech archaeological sites. Stone’s primary evidence of Pech pre-Columbian occupation of her Patuca Valley region does not argue against Davidson’s more westerly delimitation.

The only other archaeological evidence that Stone mentioned from her Patuca Valley involves the area around Brauvila. She reported that Dr. W. D. Strong visited the Patuca Valley in 1935, and obtained a few specimens from the region above Brauvila. The outstanding object was an undecorated green stone bowl which is now in the United States National Museum at Washington. The writer also visited this section, and from her personal observations it would appear that most of the Patuca area is Paya country. (Stone 1941: 24)

Brauvila is located on the middle Patuca just downstream from Wampusirpi. No discussion of the artifacts or sites in this area is included. We are therefore left with Stone’s closing sentence above as the basis for her inclusion of the Patuca Valley within the early Pech region, in spite of evidence from only two areas, one of which is more properly considered as part of the Olancho Valley, which Stone tends to associate with the Lenca, than the Patuca. We are also left to question why Stone does not extend her boundary all the way to the Río Coco, or even into Nicaragua, given her brief discussion of the Segovia Valley:

Having associated then a certain class of ware with the culture of the Paya Indians, we turn to the eastern boundary of present Honduras. This is the Segovia River which also has been called the Coco and the Wanks. Little work has been done archaeologically in this section. Spinden, however, reports in a brief paper published by the XXI International Congress of Americanists, specimens consisting mainly of pictographs and stonework which we classify as Paya, and which he has traced even farther eastward up the Bluefields River in Nicaragua. (Stone 1941: 22)
She appears, then, to accept the excursions by Strong and herself as sufficient for including the Patuca Valley within her 1966 Pech region, but not the work of Spinden on the Coco and points south. It should be noted that Davidson included the works of Spinden, Strong, and Stone in his review of archaeological research that led to his Pech region delimitation.

Upon close examination of the limited evidence upon which prior delimitations of the early Pech region were based, then, little substantial contradiction of Davidson's newly proposed region is found. Like each of the other delimitations, his contains the modern core of the Pech region. Differing interpretations of the very limited ethnohistorical and archaeological data for interior eastern Honduras, however, have led various authors to locate the boundaries of the early Pech region in slightly different places. Davidson's boundary delimitation shows the greatest divergence from all prior delimitations of any to date. The unknown quality of early interior eastern Honduras makes interpretation of the historical documentation necessary but also leaves much room for argument. While each of the prior authors produced a description and/or a map of their proposed Pech region, rarely do they provide evidence beyond their interpretation of the documentation for their exact placement of the boundaries. Their interpretations of the extent of the Pech region along the coast depend upon their beliefs regarding the nature of the Bay Islanders and, to the interior, upon the scant references to the Paya from the seventeenth century forward and the supposed locations of neighboring groups. Davidson's differing delimitation was based upon his determination that the Bay Islanders were Pech and upon the inclusion of the few more recent studies.
of archaeology and of the distribution of neighboring groups now available. The prior works provide no evidence to convincingly contradict his westward shift of the region. His exclusion of the coastal lands eastward of the mouth of the Río Negro from the Pech region is agreed to in the more recent writings (Stone 1966, Lara Pinto 1991). In the west only Conzemius' place name evidence contradicts Davidson and, since he did not produce a map showing the toponym regions and later work does not support his contention, we can accept Davidson's western boundary, particularly south of the Río Aguán, as reasonable. In the southeast, Chapman and Stone, both following Squier, cite ethnohistoric evidence for boundary placement at the Patuca, and that evidence is now proved incorrect. Stone’s archaeological evidence in this area is scant and, in part, geographically incorrect. The Patuca’s traditional role as the demarcation line would seem to be based upon convenience in that it is a major river lying between two known native groups in any area about which very little is known for the Contact era. The early ethnohistoric record, particularly in light of its tendency toward confusion between and misidentification among the native groups of eastern Honduras, simply provides insufficient evidence upon which to delimit exact cultural borders in the interior between the Ríos Coco and Plátano. Davidson’s inclusion of the archaeological surveys of the area and, no doubt, the distribution of Tawahka toponyms from his own research in his considerations provide the most substantial body of evidence concerning the southeastern boundary of any Pech delimitation to date.

Davidson’s work represents precisely the type of effort at ethnohistoric correlation that Healy identified a need for more of in his 1984 review. It remains to be
seen how it will be accepted and utilized by archaeological researchers in the area but, for now, it remains the best comprehensive interpretation of the Pech situation around the time of Contact.

The purpose behind our consideration of the extent of Pech territory at Contact is to provide a baseline from which to measure the impact of territorial reduction and culture change on the Pech since the arrival of the Europeans. As is obvious from the review of scholarly works related to the pre-Columbian territory of the Pech, such a baseline has proven difficult to establish and remains vague and open to debate. Throughout the remainder of this work, we will use the interpolated version of Davidson’s 1991 delimitation as the standard because it is the most recent and thorough interpretation of the available evidence as well as because it appears to represent a suitable cartographic compromise between the various delimitations of both the Pech and neighboring group regions.

It should be emphasized, however, that the main point of this work is substantiated by any and all of the various delimitations of the early Pech region. Since the time of the arrival of the Europeans in Honduras, the Pech have experienced a severe reduction in the amount of land available to them for subsistence. This point is made abundantly clear when we consider the extreme maximum and minimum amount of territory that has been proposed as a part of the pre-Columbian Pech region through an examination of the cartographic union and intersection of the various Pech region delimitations. When the five early Pech regions proposed by Conzemius, Johnson, Chapman, Stone, and Davidson are plotted on the same map, a single region
encompassing all of the territory delimited by each of the authors can be created from the union, or combination, of the five individual regions (Figure 7). Such a maximum possible territory extends from the Bay Islands to southern Olancho and even into northeastern El Paraíso, and from the western border of Olancho to Cape Gracias a Dios. Conversely, a minimum possible region can be created from the intersection of the five delimitations to represent only that territory that is claimed for the Pech by all five of the individual regions (Figure 8). The resulting minimum overlapping region extends along the coast from the Río Aguán to the Río Negro and inland to the area of Catacamas in the Olancho Valley. The intersection of the five regions is, of course, much smaller than the region created from their union, but even this subset of territory which all five authors have agreed was part of the early Pech region represents a much larger area than the total lands inhabited by the Pech today. Thus, irrespective of which delimitation one chooses as a Contact era starting point—either of the five proposed regions, their maximum union, or their minimum intersection—the point still holds that the Pech have experienced massive territorial reduction over the last five hundred years.

Reviewing the various efforts at ethnohistorical reconstruction is akin to a trip down the Wampú or Paulaya. After you get into it a little way, you are stuck with a difficult, quagmireous trek that must be followed until, at last, a way out is found. You then take your leave on the available transportation, knowing that more time and farther trekking could pay dividends, but only at the cost of more time, energy, and missed opportunities for other activities.
Figure 7. Cartographic union of the early Pech region delimitations.
Figure 8. Cartographic intersection of the early Pech region delimitations.
Together, these delimitations of Pech and neighboring culture regions give a fair indication of the territories inhabited and utilized by the various indigenous groups of eastern Honduras prior to European contact and during the first centuries of the colonial era. Since contact, the pattern, with the exception of the Miskito and Garifuna, has been one of territorial reduction on the part of indigenous groups at the expense of territorial expansion on the part of the colonizers and their descendants. For the Pech, then, these early culture region delimitations prescribe the maximum extent of lands available for exploitation. Comparison of this maximal territory with the present situation illustrates the magnitude of Pech territorial reduction since contact—territory lost mainly to the Spanish and their ladino successors.
CHAPTER 4

The Pech Region during the Colonial Era: Retreating before Spanish Occupation

Introduction

The previous chapter reviewed various interpretations of the Pech region at Contact and therefore provides a baseline against which to measure territorial reduction since the arrival of the Europeans. Although population migrations and competition for lands among indigenous peoples created changes in the territorial mosaic prior to Columbus' first visit, within the bounds of this work, the Contact region can be conceived of as the maximum territory controlled by the Pech for their subsistence activities. Comparison of this maximal territory with the present situation illustrates the magnitude of Pech territorial reduction since Contact through the encroachment of, primarily, the Spanish and their ladino successors into Pech lands. The alienation of the Pech from their lands began almost as soon as the Spanish arrived in the region and continues to threaten them today. The process of Pech territorial reduction via the expansion of Spanish control during the colonial period will be the focus of this chapter.

The arrival of the Europeans in the New World brought to the scene a new competitor for control of the land in the Pech region. The Pech had no doubt had to compete for control of the land with their neighboring native groups prior to the coming of the Europeans, but the extent of any intra-Indian territorial conflicts in eastern
Honduras at the time of the discovery is unknown. The ancestors of the Pech themselves are believed to have migrated from northern South America in the centuries before Columbus' arrival, perhaps, in the process, displacing prior native residents. Nevertheless, they were established within a large area of eastern Honduras upon European arrival and thereafter faced the loss of territorial access and control to the Spanish in the north and west and, later, to the British and their allies to the east.

At least from the time of the Treaty of Tordesillas, Spain had a recognized claim to the, yet undiscovered, Pech territory as part of the Middle American mainland which lay west of the Line of Demarcation. Columbus' discovery and possession of the northeastern isthmian mainland for Spain on his fourth voyage in 1502 solidified the theoretical ownership granted by the treaty. While knowledge of the interior and its inhabitants was still in its infancy, the act of possession brought the Pech, as well as the other native groups of the mainland, under the nominal authority of the Spanish Crown.

The process of the Conquest in the decades that followed then advanced the level of Spanish ownership and authority from the realm of nominal claims to actual control. In contrast to the rapidity with which conquest was achieved in the wealthier and more highly organized societies such as the Aztec and Inca, however, the process was more gradual in eastern Honduras and, in fact, portions of it remained outside of European control throughout the colonial period. Although the Pech were among the first mainland peoples contacted by the Spaniards and, some twenty-two years later, their territory was the site of one of the earliest Spanish settlements in Honduras, the difficulties of conquest and the relative unattractiveness of the far eastern lowlands...
delayed certain impacts of cultural contact and eventually prevented the spread of effective Spanish control to some parts of their region.

The impacts of Spanish presence in the Pech region no doubt began with the arrival of Columbus on the mainland of the New World during his fourth voyage in 1502, although much greater and more rapid changes to native lifeways in the area were initiated in 1524. After stopping in the Bay Islands, Columbus proceeded to the mainland at Punta Caxinas and eventually continued east and south along the coast as far as modern Panama (Chamberlain 1953: 9-10). While in the Bay Islands, the explorers encountered an ocean-going trading canoe, from which they took the leader to serve as a translator (Davidson 1974: 26). The translator continued with the Spaniards as far as the mouth of the Río Tinto o Negro, where Columbus officially claimed the land for Castile and named the river the Río de la Posesión (Chamberlain 1953: 9-10; Lara Pinto 1991: 232, 239-240; Davidson 1991: 209; Davidson 1974: 26-27; Sauer 1966: 123, 130). Columbus traded with the natives there before continuing their journey along the coast (Chamberlain 1953: 9; Chapman 1958).

The arrival of the Europeans must have concretely impacted the natives with whom they came into contact on the Bay Islands and at the Río de la Posesión in certain, if undocumented, ways. The most likely, and possibly most benign, impact would have been psychological changes experienced from the encounter with a hitherto unknown people with substantially different technologies and artifacts. Less obvious and tangible to the natives at the time, of course, was the very real impact that Columbus’ actions at the Río de la Posesión had upon the status of the Spanish Empire and would have. after

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some time lag, upon the autonomy and the socio-political organization of the natives themselves for, unbeknownst to the Indians, as Columbus took possession of the mainland they became subjects, or at least property, of the Crown and therefore subject to royal authority. “A royal cédula of June 20, 1500 declared that the Indians of the island were to be free vassals of the Crown of Castile” (Sauer 1966: 106). “In 1503 Carib was made the official designation of hostile Indians subject to capture and sale” (Sauer 1966: 266, see also 194). They and their lands now fell, in the eyes of Spain, under the jurisdiction of the royal governor on Hispaniola, Nicolás de Ovando (Haring 1975: 10, 14), but, undoubtedly in Columbus’ opinion, by virtue of his commission in 1492 as “‘Admiral and Viceroy and Governor’ of all lands he might find” (Herring 1955: 121; also Gerhard 1972: 64 and Haring 1975: 8), under his own authority as a representative of the Crown. Sauer inferred his attitude during his tenure as governor of Española: “These were his Indies over which his rule would be absolute and which he would pass on to his heirs” (1966: 104). In either case, although unrecognized by the inhabitants, Spanish authority had staked its claim to the mainland.

It would be some time, however, until 1524, before the more concrete or direct impacts of the imposition of Spanish authority were to begin to be felt among the native populations of Honduras. In that year, the entrance into Honduras of three distinct forces led by Gil González Dávila, Cristóbal de Olid, and Francisco de las Casas from the north and one led by Hernández de Córdoba from the south marked the beginnings of Spanish attempts to consolidate control over the claimed territory (Chamberlain 1953:...
With these entradas the Indians began to be subjugated, and have their native organizations disrupted, by the Spanish conquerors.

Although it seems likely that González Dávila's march south toward Nicaragua, and perhaps Córdoba's march northward to meet him, passed through Pech territory in 1524, it was the establishment of the town of Trujillo in 1525 near the spot where Columbus first touched the mainland at Punta Caxinas that was the beginning of permanent Spanish territorial control in the Pech region. From that point on, the Pech began to experience territorial reduction at the hands of non-native peoples. Not only would the Pech continue to lose control over portions of their pre-Columbian territory in the years to come, but they would also face cultural changes as new political, economic, and religious systems were imposed by the conquerors as they expanded the area under their control. And the cultural changes were not to be limited exclusively to the Pech individuals who fell under permanent Spanish control. Disruptions to the Pech cultural and socio-economic organization from warfare, disease, settlement dislocation, and the collapse or similar disruption of neighboring native societies certainly extended to those Pech who remained unconquered in the lands east of the extent of effective Spanish authority.

As the Spanish frontier advanced from the north and west, the retreating unconquered Pech were confined within an ever-dwindling region since any possibility for expanding their territory in other directions was blocked by the presence of the Sumu Indians to the south and the British and their Miskito allies to the east. Therefore, while this study focuses predominantly on the advance of the Spaniards and their descendants
into the Pech region from the north and west, a process that continues to plague the
Pech today, some mention needs also be made of colonial European activities to the east.

The inability of the Spanish to control the Caribbean coast of northern Lower Central
America allowed it to fall under the influence of the British and their allies, the Miskito.

Helms described the resulting cultural distribution on the isthmus:

The colonial landscape of lower Central America thus was resolved into two, or
more accurately three, frontier territories: a western or Pacific sector controlled by
Spanish colonists; an eastern or Caribbean coastal sector thinly settled by English-
speaking peoples and indigenous natives; and a strip of interior mountainous
country, between the Spaniards and the British, still populated only by indigenous
peoples. (Helms 1976: 8)

The Pech, and to the south of them the Sumu, were the occupants of this central,
indigenous zone in colonial eastern Honduras and northern Nicaragua. But, while this
unconquered area provided a place of limited refuge for its inhabitants to the end of the
colonial era, it gradually shrank before the expanding spheres of influence of the
European powers and continued to do so after Independence.

Because the extent of the pre-Columbian Pech region along the Caribbean coast
is somewhat uncertain, it is difficult to estimate the magnitude of territorial reduction
that they may have suffered at the hands of the British and Miskito to their east. All of
the pre-Contact Pech region delimitations reviewed earlier do, however, place some
portion of the littoral within their control and this territory was eventually lost to new
arrivals, either Spanish or British/Miskito. As Helms noted, the British and, more
importantly, their Miskito allies were apparently thinly settled along the coast and,
except for along the Río Coco, their settlements did not extend far to the interior
The Miskitos are reported, however, to have conducted raids into the interior as far even as the Olancho Valley (Newson 1984). The ability to extend their power far to the interior, then, served to deter significant Pech expansion to the east in spite of the fact that the Miskito may not have established permanent settlements very far inland from the coast. In relation to the Pech, then, the British and Miskito occupation of the east coast of Honduras may have reduced Pech territorial control to some extent but it certainly limited the eastward extent of their possible retreat before the advancing Spanish and thereby assured the continuing constriction of the area available for the subsistence of the unconquered Pech.

That portions of Pech and Sumu occupied eastern Honduras remained unconquered throughout the colonial period has already been mentioned. Spanish control was established early in the colonial period in northern and western portions of the Pech region, however, at Trujillo and in the Olancho Valley. As was the case generally in Honduras, the consolidation of Spanish control around the settlements established in the first half of the sixteenth century provided the bases from which they expanded their authority over larger areas (Chamberlain 1953: 225-226; Perez-Brignoli 1989: 36). Expansion eastward from the settlement centers at the edge of the frontier, however, was difficult and had not progressed very far by the end of the colonial era. More successful, although still a gradual process, was the establishment of settlements and consolidation of much of the territory between Trujillo and Olancho which created a more definite front of Spanish colonization and influence bordering the unconquered lands to the east.
The process of consolidation of control in eastern Honduras, and attempts to expand that control further eastward after 1550, with their concomitant impacts upon the Pech of land alienation and cultural disruption, mirrored that of Spanish efforts in other frontier regions of their New World empire in that a leading role was played by Spanish missionaries. As the initial impulse of the Conquest began to wane less than a century after Columbus’ arrival at Punta Caxinas, missionaries replaced adelantados and conquistadores at the vanguard as the advance agents of the spread of Spanish culture and authority and, “before 1600, the mission was rapidly becoming Spain’s most important frontier institution” (Rippy 1958: 88-89). Haring summarized the conquest and colonization sequence in the persistent frontier areas of Spanish America and the role of the missions in that process:

In the Spanish colonies in the beginning the military explorer or conquistador and the accompanying friar laid the groundwork, but as time went on especially the missionary. As the semicivilized, sedentary Indians were all subdued and reduced to a virtual servitude, and as the frontiers were pushed beyond into the areas of the nomad savages, there on the frontier the mission played its great political role. Its function was to civilize the savage frontier, press it farther and farther into the interior, or away from the established European centers, and so prepare the way for further colonization. It also served to maintain the borders against foreign encroachment, as in Texas and California, in Guayana south and east of the Orinoco, and on the eastern margins of Upper Peru and Paraguay. (Haring 1975: 188)

Although not included among Haring’s examples, that the sporadic and usually short-lived missions of the Honduran frontier in Taguzgalpa or La Mosquitia were also intended to advance Spanish colonization in the face of foreign threats is seen in Newson’s description of the local situation after 1550:
Eastern Honduras, with the exception of the eastern fringes of the mining area of Tegucigalpa, held little attraction for the Spanish throughout the greater part of the colonial period. During the first half of the sixteenth century the rich alluvial gold deposits of Olancho had been exhausted and the Indian population, although never large, had been decimated. Although the open savannas offered excellent opportunities for livestock raising, it was not until the eighteenth century that they were colonized. The lack of incentives for the Spanish to effectively settle the area meant that only piecemeal efforts were made to bring the Indians there under Spanish control. In eastern Honduras the Indians were too small in number and too difficult to control to warrant the inputs of money and men necessary to civilize and convert them, but the English threat to the security of the Caribbean coast forced the Spanish to face up to this difficult task. They attempted to gain effective control over this area by military means and through the employment of missionaries; Crown support, both moral and financial, for missionary activities was greatest at times when imperial security was under threat. (Newson 1986: 239)

While her summary leans heavily on the military outpost function, Newson also recognized the, often aborted, colonization function of the eastern Honduran missions, which was part of an official Spanish policy that called for the mission territories and inhabitants to be turned over the secular authorities and integrated into their administered territory after ten years (Rippy 1958: 89; Newson 1986: 241).

The shift in the relative importance of the roles of the soldier and the missionary in advancing colonial authority in Honduras probably began in earnest during the middle years of the sixteenth century as the Audiencia de los Confines replaced the adelantado Francisco de Montejo as the governing authority in the province in 1544 and a royal cédula issued in 1546 ordered a temporary halt to eastward expansion of conquest and colonization (Chamberlain 1953: 223-226). Chamberlain described the situation at the time of this change in the Spanish approach to the consolidation of its control in Honduras:
With the thorough occupation of areas east of Comayagua and back of Trujillo, initial colonization of the most important parts of Honduras-Higueras had been completed by the time the Audiencia de los Confines was installed in 1544. Henceforth the settling of these already controlled territories by expanding colonization, rather than further conquest, was to follow a natural course. The inhospitable extreme east of the province, toward Cabo Gracias a Dios (that is, a large part of the general area then known as Taguzgalpa) was to prove permanently unattractive, and for that reason was long ignored. (Chamberlain 1953: 225-226)

The creation of the new audiencia finally settled the issue of the many competing Spanish claims to jurisdiction over Honduras that had plagued the province since 1524 and set the stage for a more ordered and gradual expansion of colonial authority outward from the several "strategically situated" settlements which, at the time, represented "widely separated enclaves" of consolidated Spanish control (Perez-Brignoli 1989: 36).

In the following centuries attempts to extend the conquest eastward through both military and religious means continued but achieved no permanent success. Indeed, it appears that the eastern limits of Spanish control may have actually retreated somewhat with the disappearance of the town of Nueva Salamanca sometime after 1550 (Chamberlain 1953: 222-224; Davidson 1991). Within the territory between Trujillo and the Olancho Valley, however, the work of the missionaries had a more lasting impact. Although most of the colonial missions were short-lived, a few of the eighteenth and nineteenth century settlements established by the missionaries survive today as ladino towns and villages, thus fulfilling the original plan that mission territories were to eventually be incorporated into the colonial territory and administrative system (Rippy 1958: 89, 91-92; Haring 1975: 188; Newson 1986).
The missionaries were not operating simply as agents for the political expansion of the empire, however, but were motivated by their desire to effect an expansion of the faith. The cultural changes which the missionaries brought to the Indians of frontier areas as part of the church’s efforts to civilize and Christianize them nevertheless amounted to a spiritual conquest that sometimes made the frontier more attractive and suitable for colonization. Such was also the case in the Pech region where missionary activity continued in the unconquered lands of eastern Honduras even after Honduran Independence, most notably in the work of the Spanish priest Manuel de Jesús Subirana. Through his efforts, two settlements of Pech Indians were established in the area of eastern Olancho that was then, and remains today, the core of the Pech region. Later, as economic incentives increased and transportation improved in the twentieth century, ladinos faced little initial resistance from the natives as they entered the area. The effect of missionary activity in advancing colonization in eastern Honduras thus continues today.

**Two Scales of Authority**

As can already be seen in the previous overview, the establishment of Spanish claims to possession of, and therefore authority over, a given territory and the establishment of effective control over that territory were two distinct actions or processes often separated by a considerable period of time. Indeed, the very spot at which Columbus is believed to have taken possession of the mainland in the name of the Iberian authorities was still not effectively incorporated into colonial Honduras at the time of Independence in 1821. A sufficient understanding of the impacts of Spanish
activities on the Pech and their region cannot be gained, therefore, from the consideration only of Spanish claims to the territory. Additional consideration must be given to their actions which proved the establishment of some measure of control over the claimed territories. Areas that remained outside of the control of colonial authorities both failed to contribute to Spanish economic and religious designs and provided a refuge for rebellious or isolationist Indians. Consideration of the evolving Spanish claims to territory, as expressed in the territorial divisions of the various branches of authority is still fundamental, however, to understand the jurisdictional framework within which the conquerors, colonists, and colonial authorities operated as well as to aid a geographical understanding of the regional designations commonly used in documents, historical accounts, and this work. The evolution of the system of Spanish jurisdictional units and the process of the expansion of Spanish settlement in the Pech region will serve, therefore, to illustrate the encroachment of the Spanish into Pech lands at two different scales corresponding to the establishment of nominal and actual Spanish authority in the region.

A regional perspective on Spanish expansion, via consideration of an evolving territorial division into its various jurisdictional units, not only provides an historical overview of the expansion of Spain's nominal authority in the Pech region but also lays the foundation for understanding the development of later political subdivisions. Although Spain had established a claim to all lands west of the Line of Demarcation established in the Treaty of Tordesillas, the new territories were not to remain a single jurisdictional entity. As discoveries continued and geographical knowledge of the extent
and configuration of the new lands increased, royal authority, vested first in the
*adelantados* and later in various appointed officials and councils, was extended to
representatives to explore, conquer, and govern distinct portions of the New World in
the name of the Crown. The territories assigned to the *adelantados* to conquer and
settle, then, were the early jurisdictional subdivisions of Spanish mainland Middle
America. As the need arose, the earliest units were further subdivided as authority to
conquer or govern portions of them was granted to other agents.

Although the territorial subdivisions of the Spanish Empire in the New World
were obviously not independent political states in the modern sense, within these
jurisdictional regions nevertheless were exhibited the diverse territorial characteristics
that have been discerned by political geographers to be common to many political
regions such as cores, peripheries, frontiers, and areas outside of effective political
control. The core areas, of course, included the major centers of settlement and were the
locus of political, military, and religious authority. The peripheries encompassed the
lands surrounding the core areas which were subject to the core politically and
economically and which served in turn as its hinterland by supplying the raw materials
and produce needed for its maintenance. In the early years of Spanish activity in
northern Central America, frontier zones separated not only Spanish controlled areas
from Indian controlled areas, but also areas under the control of competing Spaniards.
Later, and most commonly during the colonial era, the frontiers lay between consolidated
Spanish territory and unconquered Indian lands or territories controlled by other
European powers. From the perspective of Spanish jurisdiction, areas outside of
effective control included the frontier areas and the territories beyond the frontiers which were under the control of Indians and non-Spanish Europeans. Of course, during the earliest stages of the conquest, as well as after the final consolidation of all territory within a particular jurisdiction, each of these territorial expressions of political authority may not have been present or readily discernable in every Spanish jurisdictional unit.

Recognition of the existence of these zones, defined by Spain’s differential ability to project its power and authority over the territory, highlights the distinction between Spain’s universal nominal claim to the New World and the extent of its actual authority in the region at a given time. Of course, the geographic positions of these various zones was not static. As conquest and colonization proceeded, the cores extended their control over expanding peripheries or hinterlands and pushed back the frontier zones that separated the territories within their control from those outside of it. Thus, the early conquest and colonization process brought rapid change to these territorial expressions as Spanish power and control expanded.

It was not everywhere an inexorable process of expansion, however, as in some areas Spanish authority waxed and waned, like in any war, with the advance and retreat of the limits of Spanish control. In these contested areas, and particularly in the earliest stages of the conquest, Spanish settlements were established and failed and Indian populations were subjugated and revolted in turn. Eventually, however, the Spanish consolidated their control over the core areas and large hinterlands leaving only marginal areas that were less desirable and less easily subjugated as frontier zones and areas outside of effective control.
Although the regional perspective focusing on the Spanish jurisdictional units which evolved from the conquest and the subsequent development of the colonial administrative system is valuable as an aid to a geographical understanding of the historical events, the presence of frontiers and areas outside of effective control until the end of the colonial era within the territories claimed by Spain, and particularly within the Pech region, highlights the need for a closer examination of Spanish conquest and colonization activities to more fully illuminate the process of Pech land alienation. A more detailed look at Spanish activities helps to differentiate the areas actually occupied and controlled by *conquistadores* and colonists from those areas outside of their control and thereby provides a more accurate estimate of the extent of their encroachment upon the Pech region at a given time. The settlement level perspective, then, serves to correct the mistaken impression of extensive early Spanish territorial control in eastern Honduras that might arise from consideration only of the establishment of official claims and the rapid proliferation of regional jurisdictions in the area.

As implied in the above discussion of the various spatial expressions of Spanish authority within jurisdictional claims, the establishment of permanent settlement and control over territory proceeded more slowly than did the royal granting of authority. Indian occupied lands had to be conquered before the granted authority could be effectively implemented. Thus the expansion of the power of the core areas over areas outside of effective control was a process that extended over a period of time and at any given moment the area effectively controlled may not have corresponded entirely to the area of nominal authority. This differential between an area of nominal authority, a
jurisdictional unit, and its area of actual authority is described by another set of geographical concepts, formal and functional regions.

The formal regions of the jurisdictions, as defined by the nominal claims to authority, contained frontier zones and areas outside of effective control that were not yet incorporated into their political and economic system. Their functional regions, as defined by their sites of settlement and economic activity and the routes of communication connecting them, therefore encompassed less than the formal region over which they claimed authority. The limits of their functional regions, then, better define the extent of Spanish control at a given time and consideration of the expansion of Spanish settlement and related activities in eastern Honduras will serve to more specifically illustrate the spread of Spanish control over portions of the Pech region.

That some areas remained beyond the frontier of, and outside of the effective control of, the core areas for some time after their establishment raises the consideration of formal and functional regions. During the conquest, authorities in the core settlements typically laid claim to vast regions outside of the immediate vicinity of their settlements. The claimed territories were to be reserved for that particular adelantado to conquer and exploit and thus regional claims and, typically vague, delimitations proliferated to encompass more territory than was actually conquered. The lands falling within a particular claim, after approval by the higher authorities, then, can be conceived of as a formal region. Although often vaguely defined and contested by other conquerors, the territory granted to an adelantado was within his jurisdiction and thus united under his political authority. Such a defined region, particularly in the early years,
was seldom a reality. Much of the territory remained unconquered for some time and until it was, the functional region controlled by an adelantado was less than the formal region nominally under his authority. The functional regions at a given time better define the status of conquest and control than the farther-reaching formal regions. Thus, consideration of the actual expansion of settlement in an area gives a more detailed view of the lands conquered and controlled by the Spanish at a given time.

We will first review the establishment of Spanish nominal authority in the region through its creation of jurisdictional territories before turning to examine the establishment of actual authority, as measured by settlement expansion, during the colonial era.

**Development of Nominal Spanish Authority in the Pech Region**

With Columbus’ discovery and possession of the Middle American mainland in 1502, the Pech region, along with the rest of the mainland, was claimed as the personal property of the Spanish Crown and was thereafter nominally under Spanish control. This ignored, of course, any prior claims, and the actual authority, of the natives groups over the territory by virtue of their occupation and utilization of the land. In the eyes of the Spanish empire, the infidel Indians forfeited any right to control their lands to the God-given authority of the Crown as Columbus officially claimed the New World at the Río de la Posesión. The ability to enforce their authority over their new possessions, including the Pech region, was, however, much slower to develop. The evolution of territorial divisions for political jurisdiction, although certainly related to the advance of the Conquest, represents the process of the expanding nominal authority of the Crown.
Territorial division initially created formal regions of political authority encompassing large areas outside of effective control and within which the early functional regions of control were to expand until the formal and functional regions were identical.

The creation of new jurisdictional subdivisions might be viewed, then, as an intermediate stage or series of stages in the overall process from the earliest claims of nominal authority to the final establishment of effective authority which constituted the discovery and conquest of Spain's New World territories. Since at least the ratification of the Treaty of Tordesillas in 1494, Spain had achieved nominal authority over the Middle American mainland which was recognized by multiple parties (Haring 1975: 7). The action of Columbus at the Río de la Posesión in 1502, therefore, seems redundant but it served to reinforce Spain's claim to the newly discovered land and made its heretofore theoretical ownership a reality specific to the mainland. The subsequent proliferation of territorial divisions, along with the appointment of local representatives of royal authority within them, as the process of discovery and conquest proceeded did likewise with even greater degrees of specificity.

The delegation of royal authority to numerous agents in various jurisdictional subdivisions was not intended merely to solidify nominal claims to territories, of course, but also to advance more effectively the conquest and, later, to assure governance more in accordance with the Crown's desires. Territorial divisions, then, evolved in response to the changing administrative needs during the conquest and colonial periods, and the process of their development in Central America can be divided into three main historical periods which are defined by the sequence of governmental systems employed there by
Spain. This three-fold periodization will be most convenient for our purposes. It contrasts somewhat, however, with the four-fold periodizations employed by other writers concerned with the political history of the area.

Four historical periods of Spain's political administration both throughout the New World and within the Audiencia of Guatemala have been identified by C. H. Haring (1975: 69-70) and Peter Gerhard (1972: 129), respectively. Although Haring did not attempt to establish firm beginning and ending dates for his governmental periods, for comparative purposes, and in danger of imposing too strict limits on a somewhat gradual process of change which occurred over a wide area, we can interpret his generalized description to divide the periods as follows: Period 1, the era of conquest led by the adelantados, 1492-1540; Period 2, the era of consolidation of royal authority in the institutions of government, 1540-1573; Period 3, the era of stability or stagnation in governmental innovation, 1573-1759; and Period 4, the era of Bourbon Reforms, beginning especially with the reign of Charles III, 1759-1821.

Gerhard succinctly described his four-fold periodization of the political organization in the territory of the Audiencia of Guatemala:

The political history of this area under Spanish rule can be divided into four periods. In the first (1520-44) the Spaniards conquered most of the country, and royal governors were appointed in Chiapa, Guatemala, Honduras, and Nicaragua. The second (1544-60) saw the establishment of an audiencia distinct from that of Mexico, originally resident at Gracias a Dios but soon (1549) moved to Guatemala City. During these years the audiencia took charge of all branches of government, royal governors being replaced by alcaldes mayores and corregidores appointed and controlled by the audiencia. In the third period (1560-1786) governors were again sent out from Spain, and a long and serious jurisdictional conflict occurred between the audiencia with its president-governor on the one hand, and the
governors of the individual provinces on the other. In the final period (1786-1821) the intendency system was imposed. (Gerhard 1972: 129)

Gerhard's periods, then, are marked by specific dates determined by the locus of governing authority over the various provinces of the Audiencia of Guatemala while Haring's periods are more general divisions determined by changes in the Spanish implementation of governing policies in the whole of the New World. Although the dates dividing the two periodizations do not correspond exactly, a general agreement can be seen between the two frameworks to which we can compare the evolution of governmental jurisdictions in our area.

As noted above, we will here consider the evolution of territorial jurisdictions within three historical periods that represent a collapsing or condensation of the four-fold divisions. The first and last temporal divisions are analogous to the beginning and ending periods of both Haring and Gerhard and correspond to their eras of conquest and initial consolidation in the beginning and of the intendency system in the end. Our middle period, however, represents a combination of the two middle periods presented by each of the other authors. Gerhard's middle periods span the years from the establishment of the Audiencia of Guatemala in 1544 to the imposition of the intendency system in 1786. Haring's middle periods, although expressed in more general terms, imply roughly the same time span from the end of the prominent role of the adelantados and conquistadores to the beginning of the major reforms of the Bourbon Kings. For our purposes, we will consider a single middle period marked by the consolidation of royal authority in the institutions of the viceroy, governors, and audiencias until the
reorganization of the territory into intendencias which brought a shifting of some authority from the earlier officials to the intendentes. Thus we gloss over the political-historical distinctions between Gerhard’s periods of audiencia control and competition for authority between the audiencia and the provincial governors and between Haring’s periods of innovation and implementation of royal authority and subsequent relative institutional stability.

The many changes and subdivisions of territories over the colonial history of the area confound an understanding of the political geography of New Spain and of any particular locality’s situation within the Spanish jurisdictional system. The many changes were necessary, however, because this was a continually evolving system. The initial ignorance of the geography of the New World made it impossible to impose a governing framework to encompass all territory from the beginning. Newly discovered territories had to be added to the system and new claims over territory by competing conquistadores led to further subdivisions. And these new territories were often initially poorly defined. As Spanish control was consolidated and expanded, continued subdivision of all levels of the hierarchy into smaller areas were necessary to make administration more efficient.

But the sequence of the conquest was not a strictly linear process of expansion outward from several early settlements to encompass all of the isthmus which could then be divided for efficient administration. Rather, the conquest proceeded in its early stages via a process of relocation diffusion, as opposed to expansion diffusion, whereby groups of conquistadores moved from the earliest settlements to distant locations in which they
established new centers from which their control could expand to nearby areas. Panama City and Mexico City were established in 1519 and 1521 respectively, and provided the bases from which the conquest could proceed. But their areas of control did not simply spread outward to encompass ever increasing, contiguous conquered territories. As much is indicated by the fact that the conquest did not produce only two primary regions in Middle America controlled by Mexico and Panama as well as by the sequence of the establishment of gobernados, which saw the creation of Honduras and Nicaragua prior to the creation of gobernados lying between them and the two earliest centers such as Guatemala, Chiapas, and Costa Rica (see table in Cline 1972b: 22). Indeed, the core areas of Chiapas, Guatemala, Honduras, and Nicaragua early developed into “important and virtually autonomous administrative centers . . . on the isthmus” (Woodward 1985: 35). The phenomenon was repeated on a more local scale in countries such as Honduras (Perez-Brignoli 1989: 36). From these early centers, which initially claimed nominal authority over much larger areas than were effectively under their control, Spanish control spread outward in a process more akin to expansion diffusion but, in most cases on the isthmus, never completely consolidated their entire claim.

From this overview we can turn to more a more specific consideration of the history of the political geography, the development and expansion of Spain’s nominal claims, pertinent to the Pech region with the aim of understanding that Spain early on claimed nominal authority over the area; that various regional designations were employed for the area and surrounding territories as a result of early geographical ignorance, competing claims over its jurisdiction, and changes in the local jurisdictional
subdivisions; and that, in the end, effective control was never firmly established throughout the entire area.

Early Isthmian Antecedents

Prior to the installation of the Audiencia de los Confines, the explorers, adelantados, and royal governors discovered and named territories on the isthmus, established specific claims to them, and sought to expand those claims. Their early activities led to the use of a variety of names for portions of the isthmus that are difficult to delimit because, out of geographical ignorance, they were poorly defined and because competing claims and the process of conquest created overlapping regions, created new regions, and abolished other regions. Regional names could, of course, be vernacular or official territorial designations which increases the potential for confusion. We are here primarily concerned with the official regions, those for which royal authority was granted to particular persons to conquer and govern. The Pech region eventually came to be, nominally at least, a part of the province of Honduras but during the age of the adelantados eastern Honduras was the subject of competing Spanish claims extending into the Pech region from the north, south, and east and it is the evolution of these claims that we will consider first.

Two of the three territorial claims extending into the Pech region during this time, those on its southern and eastern sides, evolved out of Columbus' exploration of the Central American coast and the subsequent intra-Spanish struggles for control of the isthmus centered in Panama. Veragua, to the east and which was later known also as Cartago and Taguzgalpa, was one of the first mainland territories granted for conquest in
1508 and remained as a jurisdictional region, albeit unconquered, at the end of the age of
the adelantados. Nicaragua, to the south, was created later, in 1527, as part of the
process of the subdivision of the isthmus as the conquest proceeded. Both provinces,
then, trace their origins directly, in the case of Veragua, or indirectly, in the case of
Nicaragua, to the earliest territorial divisions, that is, the earliest extensions of nominal
authority, of the New World mainland known by the Spanish as Tierra Firme.

Early Nominal Authority in Honduras

The history of relative isolation and unconquered status of the eastern coastal
lowlands of Honduras and Nicaragua dates to the early years of the Conquest. The
eastern lowlands, known as La Mosquitia today, were apparently components of an
entity separate from Honduras and Nicaragua since early in the sixteenth century
(Conzemius 1928:23). During the early years of Spanish exploration and conquest of
the isthmus territorial divisions were vague and often redefined. Conzemius reported
that the territory from Panama to Cabo Camaron in Honduras comprised the Province of
Veragua or Cartago "durante la primera mitad del siglo XVI" (1928:23), and that,
during the colonial period, a variety of names were applied to this entire area, or portions
of it, including Veragua or Beragua, Cartago, Costa de Orejas, Cariay or Cariari, Castilla
del Oro, Taguzgalpa, and Tologalpa (1928: 23; 1932: 1). Conzemius also reported that
Diego de Nicuesa was the first Spaniard to be charged with the conquest of this entire
province in 1508 (1928: 24). In contrast, García Añoveros and Woodward both stated
that the adelantado's territory, which García Añoveros called "la Veragua" while
Woodward used the name "Castilla del Oro," extended from the region of the Gulf of
Darién only as far north as Cape Gracias a Dios (1988: 52; 1976: 26). That these delimitations were made only with reference to the Atlantic coast is a reminder that the interior, indeed, even Central America’s status as an isthmus, was still unknown. Until Balboa’s discovery of the Pacific Ocean in 1513 (Woodward 1976: 27), the Crown could not have known of its narrow configuration. García Añoveros’ account agrees with Conzemius’ date of 1508 as the year in which Nicuesa was granted authority over his territory but Woodward specified 1509 as the year that Fernando V granted the concession (1988: 52; 1976: 26). Thus, the confusing multiplicity of territorial designations, as well as some disagreement as to the historical facts, is already seen in the earliest stages of mainland settlement.

As the jurisdictional structure evolved the early names for the Honduran and Nicaraguan portions of the Atlantic coast “desde el Río San Juan o Desaguadero hasta el Río Aguán” gave way to the designation of the Province of Taguzgalpa and eventually the Nicaraguan section became Tologalpa while only the Honduran portion, north of the Río Coco, was referred to as Taguzgalpa (Conzemius 1928: 23; García Añoveros 1988: 47-48). The latter two names were employed by the Spanish for most of the colonial period (Conzemius 1932: 1), although Taguzgalpa or Teuzgalpa at times was used in reference to the combined territories of Taguzgalpa and Tologalpa (García Añoveros 1988: 48; Stone 1966: 213; Stone 1941: 8; Vázquez: 189 in Chapman 1978: 6-7). The common post-colonial designation of La Mosquitia in reference to both the Honduran and Nicaraguan Atlantic lowlands developed from the name which the English applied to
the area, the Mosquito Coast, beginning in the mid seventeenth century (Conzemius 1932: 1; García Añoveros 1988: 48; Stone 1941: 7).

The uncertain and changing nature of the early colonial jurisdictions was not confined to the Atlantic seaboard, however, as is seen in Chamberlain's (1953) account of the early colonization of the isthmus. As exploration and colonization proceeded south from Mexico and north from Panama, jurisdictional units evolved out of the conflicting claims of the conquistadores. The Spanish had established the town of Panama in 1519 and began explorations northward along the Pacific coast. Gil González Dávila and Andrés Niño sailed as far north as the Bay of Fonseca and explored western Nicaragua in 1522-23 and Francisco Hernández de Córdoba founded the towns of Granada and León in 1524. On the basis of these expeditions, the two governors of Panama, then known as Castilla del Oro, during this time, Pedrarias Dávila and Pedro de los Ríos, each claimed that Nicaragua fell within the jurisdiction of Castilla del Oro while López de Salcedo, governor of Honduras, also laid claim to Nicaragua as part of Honduras. González Dávila, Hernández de Córdoba, and Pedrarias, then governor of Castilla del Oro, each claimed Nicaragua for himself and fought among themselves for its control. Spanish activities during this time were concentrated in western Nicaragua and northward into Honduras, in which they attempted new conquests and through which they sought access to the Caribbean, rather than in the eastern portions of the country that were to become Taguzgalpa–Tologalpa. In 1524, González Dávila, who had gone to Hispaniola to press his claim to Nicaragua with Spanish authorities, sailed from Santo Domingo to return to Central America. He founded a town near the mouth of the Río
Dulce, in modern Guatemala, and then sailed to "a point east of the Cabo de Honduras and pushed inland toward Nicaragua." Hernández de Córdoba sent a force northward from Nicaragua to meet this group, whereupon they fought for control of the territory. Although González Dávila’s men were victorious, he turned back toward Puerto de Caballos on the north coast. The Spanish now had traversed the interior of the isthmus from Honduras to Nicaragua, but the issue of authority over the territory was far from settled.

In addition to the Spaniards whose initial interest was Nicaragua, Hernán Cortés sent Spaniards to Honduras from his base in the north. He sent an expedition led by Cristóbal de Olid to Honduras from Mexico in 1524, the same year that González Dávila had established San Gil de Buenavista and attempted to return to Nicaragua overland. Olid’s group arrived on the north coast in May and founded the town of Triunfo de la Cruz to the east of González Dávila’s settlement. Olid then renounced Cortés’ authority and claimed Honduras for himself. Cortés then sent Francisco de las Casas with a second force to reestablish his authority in Honduras. Although Olid was initially successful, capturing not only las Casas but his other competitor in the region, González Dávila, as well, the captives were later able to kill Olid and restore Cortés’ authority. Las Casas and González Dávila then returned to Mexico, leaving instructions to move the town of Triunfo de la Cruz to Puerto de Caballos and to rename it Trujillo. The remaining men, instead, established the new settlement to the east at the Cabo de Honduras in May of 1525 (Chamberlain 1953: 14-15; Davidson 1991).
The chaotic situation in Honduras led Cortés to organize and lead an expedition there in 1524-25 so that he could personally take charge of the territory. During his time in Trujillo, which lasted until April 1526, Cortés sought to expand his influence southward into Pech lands that he claimed (Chamberlain 1953: 18-19). His lieutenant, Gonzalo de Sandoval, subdued “a number of populous districts” to the interior and twice confronted expeditions sent from Nicaragua by Hernández de Córdoba. As resistance to Córdoba’s claim to authority in Nicaragua grew among the residents of that territory, he sent word to Cortés asking him to take control of Nicaragua rather than returning authority to Pedrarias. Cortés had begun plans for Sandoval to go to Nicaragua when conditions in New Spain forced him to return there from Honduras. Had Cortés achieved authority over Nicaragua before his departure, the contest for the lands between Honduras and Nicaragua might well have been decided without further intra-Spanish conflict. With the two provinces united under a single authority, the conquest and colonization of the lands lying between the west coast of Nicaragua and the northeast coast of Honduras could have proceeded in a more organized fashion.

Cortés’ departure prior to consolidating control over Nicaragua, however, left the door open for continued conflict between the crown-appointed authorities of Honduras, Diego López de Salcedo, and Nicaragua, Pedrarias, who was replaced as governor of Castilla del Oro by Pedro de los Ríos but regained authority in Nicaragua upon the creation of the Captaincy General of Nicaragua. Upon his arrival in Nicaragua in 1528, Pedrarias’ authority was accepted by the Spaniards and Salcedo was jailed for almost a year until an agreement over the jurisdictional boundaries of Honduras and
Nicaragua was reached. Chamberlain (1953: 23) described the territory under Salcedo’s jurisdiction that resulted from this agreement as “restricted to a region lying along the north coast from Cabo Gracias a Dios on the east to Puerto de Caballos on the west and projecting into the interior in triangular fashion” (see also Alvarez Rubiano 1944: 357-358, 656, 664). These limits did not effectively determine the course of colonization efforts within Honduras in the near future, however, as Spaniards from Trujillo soon moved into lands to the west of the delimited territory while its easternmost sections went unconquered for the remainder of the colonial period.

The inclusion of territory as far east as Cape Gracias a Dios within Salcedo’s jurisdiction indicates that the area which became known as Taguzgalpa was not considered a separate entity from Honduras in 1529. Likewise, González Dávila’s original plan to return to western Nicaragua in 1524 by landing on the Caribbean coast of that country (Chamberlain 1953: 11), as well as the assumption that the eastern territories south of Cape Gracias a Dios were included within the jurisdiction of Nicaragua under the 1529 agreement, provide indications that eastern Nicaragua was thought to be a part of that province rather than a separate Taguzgalpa. By 1540, however, the situation had apparently changed as Spanish attentions in Honduras had turned westward and the eastern regions went comparatively ignored.

The name Higueras had been associated with portions of the modern territory of Honduras since the earliest days of Spanish exploration there (Stone 1941: 4) and by the mid-1530s, at least, the area of Spanish activity and interest in this portion of the isthmus was known variously as the “Provincia de Higueras e Cabo de Honduras” (Chamberlain
1953: 29), “la provincia de Higueras y Honduras” (Leyva 1991: 1), or “Honduras y Higueras” (Pedraza, Relación de la provincia de Onduras e Igueras, 1544. Colección Muñoz. Tomo 78. Folio 191 in Alvarez Rubiano 1944: 661). The province thus had two components—Honduras to the east and Higueras to the west. Chamberlain (1953: 29) described the territory of the Honduras section as occupying the north coast “westward from Cabo Camaron, including Trujillo, to a point some leagues west of Trujillo itself” and extending inland to include the Valley of Olancho. The lands of the Higueras section lay immediately to the west of Honduras and extended “to an undefined point in the Río Dulce—Golfo Dulce region and toward the vague boundaries of Guatemala and Yucatan . . . [and] south to Nicaragua, San Salvador, and San Miguel.”

Chamberlain’s description places the eastern border of Honduras during the 1530s at Cabo Camaron on the coast and east of the Valley of Olancho in the interior. By this time, then, the easternmost regions were apparently seen as separate from the rest of Honduras–Higueras. Not unexpectedly, the boundary between Taguzgalpa and Honduras was poorly defined and probably changed as the settlement of the interior progressed. The region is most commonly conceived of by recent writers as the eastern territories that lay outside of Spanish control. While this seems to be a somewhat accurate conception, the limits of Spanish control or, perhaps more accurately, of their attempted colonization, waxed and waned to some extent over time. Descriptions of the territory encompassed by Taguzgalpa, therefore, vary according to the accounts followed. Taguzgalpa, that is, an unconquered region, remained in eastern Honduras throughout the colonial period (García Añoveros 1988: 53, 75; Conzemius 1928;
Davidson 1991). Its hot, unhealthy climate and lack of advanced societies with stores of wealth and dense population concentrations that could be tapped for labor made it less attractive to the Spaniards than were the highlands farther to the west (García Añoveros 1988: 77; Perez-Brignoli 1989: 34-37). While efforts to colonize Taguzgalpa were not as intense as in other parts of the isthmus, there was apparently some interest in the region.

At around the end of the age of the adelantados and the time of the establishment of the Audiencia de los Confines on the isthmus, then, the territory of modern Honduras and Nicaragua was split between Honduras-Higueras, Veragua, and Nicaragua. The 1529 agreement between Pedrarias and Salcedo placed the border between Nicaragua and Honduras at Cape Gracias a Dios, and apparently intended to incorporate the eastern side of the isthmus, the old province of Veragua, into their respective jurisdictions (Chamberlain 1953: 23). That aspect of their agreement does not appear to have been recognized by Spain, however, and Veragua remained officially and effectively outside of the control of Honduras and Nicaragua as shown by the royal appointment of new governors for the province of Veragua or Cartago in 1534 and 1540 with jurisdictions as far as Cape Gracias a Dios and west of Cape Camaron, respectively (Ireland 1941: 71-72; Hackett 1918: 68; Anderson 1911; CS 6: 133; CS 7: 105), as well as in the 1540 description of the limits of the province of Honduras-Higueras by Diego García de Celís which placed the eastern boundary at Cape Camarón (Chamberlain 1953: 29).
Jurisdictions of the Audiencia and Intendencia

The Audiencia de los Confines was decreed on September 13, 1543 and it commenced operations in Gracias a Dios, Honduras in the spring of 1544 (Chamberlain 1953: 215-216; Woodward 1985: 36; Haring 1975: 75; Ireland 1941: 72). The erection of the audiencia best marks the beginning of the middle period of jurisdictional history. Reports of the extent of its jurisdiction vary somewhat depending upon the author’s perspective and because of changes to its territory over time. Haring reported that “its jurisdiction covered the territory of all the present Central American republics, besides the isthmus of Panama or Castilla del Oro, and the provinces of Chiapas and Yucatan which now belong to the republic of Mexico” (1975: 75). Woodward reported that its jurisdiction extended “from Tabasco and Yucatán to Panama” (1985: 36). Gerhard reported that it “embraced all Central America from Chiapas to Costa Rica” (1972: 129). Chamberlain reported that

The audiencia was to have jurisdiction over Honduras-Higueras, Guatemala, San Salvador, Nicaragua, Costa Rica, Panama, Chiapas, Tabasco, and Yucatan. Each was to retain its former territorial integrity within the wider district of the audiencia. (Chamberlain 1953: 215)

Ireland stated in footnote 1 that its “jurisdiction at first covered all Central America: Costa Rica, Chiapas, Guatemala, Honduras, Nicaragua, Panama, Tabasco, Veragua, and Yucatan” (1941: 72). Molina Argüello reported that there were only five gobiernos in existence in 1544 within the territory of the new audiencia—“Chiapa, Guatemala, Honduras, Nicaragua y la de Veragua o Cartago” in addition to “Yucatán y Tierra Firme, que pocos años después fueron segregados del distrito de la Audiencia de los
Confines" (1960: 9). The seat of the audiencia was moved to Santiago de los Caballeros de Guatemala in 1548 or 1549 (Woodward 1985: 36; Haring 1975: 76) and to Panama from 1564 to 1570, after which it returned to Guatemala for the remainder of the colonial era (Gerhard 1972: 129; Haring 1975: 76; Woodward 1985: 36-38).

It is clear from the various descriptions of the jurisdictional extent of the audiencia that its authority covered the areas of modern Nicaragua and Honduras. Only two of the above authors, however, specifically mention the province of Veragua as a constituent part of the audiencia. In his 1574 Geografía y Descripción Universal de las Indias, López de Velasco did not mention Veragua or Taguzgalpa among audiencia provinces (1971: 143-144), but he did note later that the Río de Yare, which divided Honduras and Nicaragua at 13°N, flowed to the "mar del norte por las provincias de Taguzgalpa" (1971: 155). The eastern province continued to be recognized as distinct from that of Honduras and commissions for its conquest and governance were granted in 1549 to Juán Pérez de Cabrera, in 1562 to Alonso Ortiz de Elgueta, in 1576 to Diego López (Conzemius 1928: 24-25; García Añoveros 1988: 54; Ireland 1941: 72-73). In 1584 Rodrigo Ponce de León, then governor of Honduras, requested royal permission to conquer Taguzgalpa and conducted explorations of the coast for two years (Conzemius 1928: 24; García Añoveros 1988: 54) and in 1608 Guerra de Ayala, also then the Honduran governor, likewise requested such authorization (Ireland 1941: 73).

Ireland noted that "about 1650 the eastern or coast part of Taguzgalpa began to be called Mosquitia" (Ireland 1941: 73). Although the region remained outside of the effective control of the Spaniards throughout the colonial period, this eastern province
was at least by the middle of the eighteenth century officially incorporated into the

gobiernos of Honduras and Nicaragua, as can be seen in Ireland’s descriptions of the

jurisdictions of their respective governors:

On August 23, 1745, Philip V named Colonel Juan de Vera governor of the
province of Honduras from the end of the jurisdiction of Yucatan to Cape Gracias
á Dios and named Brigadier Alonso Fernández de Heredia governor of the
province of Nicaragua, including the territories and coasts from Cape Gracias á
Dios to the Charges River, exclusive. . . . (Ireland 1941: 73)

Its incorporation into the jurisdictions of its western neighbors was no doubt encouraged
by the need to establish governmental responsibility over the area in response to the
activities of the English and their allies along the coast, including the establishment of the
Miskito Kingdom in 1740.

During the period of supremacy of the Audiencia of Guatemala, the gobierno of
Honduras was divided into several internal regions such as alcaldías mayores and
corregimientos of which Molina Argüello (1960) and Gerhard 1972:133-135) provide
some detail. By the time of the implementation of the intendencia system Honduras
contained seven of these lesser political jurisdictions and one of them, Olancho, covered
almost the entire eastern half of the gobierno, including the territory still occupied by the
Pech (Gerhard 1972: 134).

Development of Actual Spanish Authority in the Pech Region

If we accept Davidson’s (1991) delimitation of the pre-Columbian Pech region,
that is, if we accept that the Punta Caxinas-Trujillo area was not controlled by either the
Maya or the Nahuas, then the loss of Pech control over portions of their territory to the
Spanish began with the founding of the settlement at Trujillo in 1525. In the eyes of the
Spanish court, of course, the loss of Pech legal claim to their lands dates to the even earlier time when Columbus claimed the entire area for the crown at the Río de la Posesión.

Establishment of Early Territorial Control

Although several attempts to establish a permanent Spanish presence in the Pech region were made after the 1525 founding date of Trujillo, by 1534 that town remained the only Spanish town in all of Honduras (Chamberlain 1953: 28). During the intervening 10 years the native societies inland from Trujillo had been disrupted and the native populations had been severely reduced through death and slavery, but the Spanish actually controlled only the territory in the environs of Trujillo (Chamberlain 1953: 28). Other settlements were established in the interior of the Pech region, in Olancho, after 1534 but most of them, too, proved transitory with San Jorge de Olancho lasting until about 1611 and Nueva Salamanca only until 1550 (Davidson 1991; Chamberlain 1953; Molina Argüello 1960). Even the port of Trujillo declined in importance in response to diminished gold production and the seat of the church was moved to Comayagua by 1558. The Spanish settled Trujillo first and maintained a presence there throughout most of the colonial period. Their attention shifted westward, however in about 1534 with the only eastern territory conquered being the environs of Trujillo (Chamberlain 1953).

About 1540, the Spanish went again into the Olancho Valley to establish longer-lasting settlements of San Jorge de Olancho and Nueva Salamanca (Davidson 1991). The Spanish thus began to control some territory in the interior of the Pech region.
About a century later, the Spanish removed the Bay Island Indians to the mainland from 1641 to 1650 (Davidson, 1974: 44-45) in what could be the first large area conquest of Pech territory. After that removal, the Pech would have been a strictly mainland group. Perhaps the majority of the inhabitants had been exterminated from the islands even prior to that, however, as Davidson noted in a later article that, “by 1526, one or two of the Bay Islands had been depopulated by slavers from Cuba (Salcedo 1526:f. 324)” (Davidson 1991: 217). The Spaniards also wrested control of portions of the neighboring mainland coast and interior from the native inhabitants very early in the colonial period. In describing the magnitude of Indian depopulation in the early Spanish controlled areas of eastern Honduras, Davidson (1991: 217-218) noted that Bishop Pedraza reported in 1544 that “less than 400 [Indians] remained in the vicinity of the port (Pedraza 1544: 417)” at Trujillo and that

At the time of Irugillen’s report, in all of the jurisdiction of Trujillo, including the Bay Islands, he believed only 150 to 180 Indians (probably meaning tributarios, or tribute-paying Indians) remained.

Although there are indirect indications of early encomiendas near Trujillo and Olancho (Salcedo 1526), the thorough Cerrato census of encomiendas (1549-1551) organized from Guatemala to cover the entire province of Guatemala, reports nothing for eastern Honduras. The implication, therefore, is that indeed few natives were organized and remained under the control of Spaniards. (Davidson 1991: 218)

Although the Spanish established footholds of territorial control on the northern and western edges of the Pech region at the very beginnings of the colonial period, they did not rapidly advance the area permanently under their control into the interior of the Pech region. The limited progress of the Spanish settlement frontier and territorial control into the Pech region that had been achieved by the end of the colonial period is clearly
evident in the status of settlement in eastern Honduras depicted in the national census of 1801.

Territorial Control Near the End of the Colonial Era: The Anguiano Census of 1801

Data from two censuses of Honduras conducted near the beginning and the end of the nineteenth century illustrate the slow but certain eastward movement of Hispanic influence in the Pech zone. The Pech region at this time, particularly at the beginning of the century but somewhat still so at its end, is still largely a matter of interpolation from a supposed reduction of their proposed Contact region. Census data and research reports provide the names of some settlements that were dominated by Spanish and ladinos or Indians but, except for the cases of settlements specified as Indian, delimitation of a Pech region remains a matter of determining where the ladinos were not.

At the turn of the nineteenth century, the political subunits along the eastern frontier of the Province of Honduras were, from North to South, the Subdelegación de Truxillo, the Subdelegación de Olanchito, the Subdelegación de Yoro, the Subdelegación de Olancho, the Tenencia de Zedros, and the Tenencia de Danli. A map of the identifiable Hispanic and Indian settlements within these jurisdictions that were enumerated in the census of 1801 shows the extent of Spanish and ladino territorial occupation and control at the beginning of the century relative to the modern national boundaries (Figure 9). Only the Subdelegación de Truxillo, the Subdelegación de Olanchito, and the Subdelegación de Olancho overlap the proposed early Pech region and the Pueblos de Indios listed for those jurisdictions therefore provide an indication of
Figure 9. Settlements and jurisdictions of eastern Honduras in the 1801 census.
Pech populations existing under Spanish control. Eastward of the Hispanic controlled territory remained the unconquered land of Taguzgalpa during the colonial period and, by the end of the century, the still largely unknown territory that was known as La Mosquitia which was home to the yet unconquered Pech. Of course, the British and their Miskito allies controlled the eastern coastal zone for the first half of the century, but this area remained largely unknown to the Honduran authorities.

Several points of interest were raised in the explanatory notes of the 1801 census (Vallejo 1893: 131). The census recognized that it failed to enumerate many Indian inhabitants of the eastern and northern portions of the Province. It estimated that 16,000 Xicaques in the “Partido de Yoro,” and about 60,000 Sambos and 10,000 to 12,000 Payas in the “Partido de Olancho” were left out of the census count. Regarding the number of Sambos in Olancho the census admitted that “ninguno sabe la verdad” and the same can certainly be said for the other two native groups. Davidson (1991: 219) reported that a document from 1592 had recorded 891 Indian tributarios in the jurisdictions of Trujillo and Olancho and he concluded that Velasco’s 1575 report of 18,000 to 19,000 tributarios, while implausible for Trujillo and Olancho, could possibly have been a correct figure for all of eastern Honduras, although lack of first hand information at the time made it impossible to estimate accurately the native population. The 1887 census recorded 6,459 indigenous inhabitants of Olancho, but it is not certain whether all of these were actually Pech, other Indians, or ladinos. Only 2,173 of the enumerated Indians resided in the two easternmost municipios of San Esteban and Catacamas and it is unlikely that all of even these were unacculturated Pech. The 1801
estimate of 10,000 to 12,000 uncounted Pech in eastern Honduras was, therefore, probably a bit high.

Another note to the 1801 census addresses the difficulties of racial identification encountered by the census. Curiously, however, the difficulty discussed is that of distinguishing between Españoles and ladinos rather than between ladinos and Indians. The note warns that not all of the families enumerated as Spanish should be considered to be so (Vallejo 1893: 131). The census notes do not discuss problems in distinguishing between ladinos and Indians, even though the quote shows that some families categorized in the highest class, the Españoles, display a characteristic, going without shoes, that has at times been employed as an identifying characteristic of Indianness.

Because the 1801 census reported the population by discreet settlements, with Pueblos de Indios listed apart from the Spanish and ladino towns, the issue of identifying Indians in ladino settlements and vice versa was perhaps less problematic than it could have been. In settlements with mixed populations, the Indian and ladino inhabitants apparently commonly resided in separate districts, facilitating their distinction by the census. Fiallos described the existence such an arrangement in San Francisco de la Paz in 1829 (1991: 311). The census identifies the Indian settlements “que tienen contiguo Reduccion de Ladinos” (1893: 131) and reports the Indian and ladino populations for these towns separately. The recognized problems with correctly categorizing even the Spanish and ladino populations in 1801 do, however, foreshadow the greater potential problem of distinguishing between the ladino and Indian populations that may be evident toward the end of the century in the 1887 census.
The 1801 census listed 32 Spanish families, 929 ladino families, and 473 solteros living in settlements of the Subdelegación de Olancho. The population was located in the settlements of Juticalpa, Manto, El Real, Sapota, Gualaco, Parroquia Silca, and Yocón. Each of these places appear on the modern maps except for Sapota, which today appears as San Francisco de la Paz (Vallejo 1893: 101; Fiallos 1991: 311). The census further noted that there were an additional “diez familias de Españoles y 397 de Ladinos que viven en Valles y Haciendas” and that the total non-Indian population of Olancho totaled 6,180 persons (Vallejo 1893: 130). Seven Pueblos de Indios with 1,523 almas and 381 Indios Tributarios were reported in the Subdelegación de Olancho. They were identified as the settlements of Parroquia de Manto Reducción, Jano, La Guata, Yocón Reducción, Sacapa Reducción, Catacamas, and El Real Reducción. All except Sacapa appear on modern maps. The location of Sacapa has yet to be identified, but its designation as a reducción indicates that it should have been contiguous with a ladino settlement of the same name. No ladino settlement of Sacapa is listed in the census. The Subdelegación de Olanchito recorded 28 Spanish families, 254 ladino families, and 186 solteros for a total of 1,692 persons in two settlements, the Ciudad de Olanchito and a “Reducción llamada la Aldea.” One Pueblo de Indios, Agalteca, with 283 inhabitants, of which 75 were tributarios, was reported for the administrative unit. Olanchito and Agalteca both appear on modern maps but the settlement of la Aldea remains unidentified. For the Subdelegación de Truxillo the 1801 census reported 480 persons including 80 Spanish families and 20 solteros in the city of Trujillo and 1,500 persons including 250 ladino families and 154 solteros in Sonaguera. Both of these remain
important settlements today. An additional 4,500 Negro residents, classified as "Negros Franceses, Ingleses, or Caribes," were listed for the *subdelegación*, but they were not attributed to any specific settlement. The census did not list any Pueblos de Indios for the Subdelegación de Truxillo. These data indicate, then, that by 1801 the Spanish had established at least eleven settlements in the three *subdelegaciones* that covered portions of the early Pech region and that the Indians living near those settlements had fallen under the control of the Spanish. That no Indians were reported at all in the Subdelegación de Trujillo and few in Olanchito reflects the early depopulation in the north. The Pech at this time must have lived to the east of Spanish controlled territory and, perhaps, in the 1700 area that Davidson delimited as uncontrolled.

In spite of the fact that Trujillo and Olancho were early centers of interest for the Spaniards, having arrived in Olancho from both north and south and having established settlements there in the 1500s, and that they had severely disrupted Indian life there by the end of the sixteenth century, the 1801 census reveals a striking sparseness of settlements behind the commonly accepted boundary of Taguzgalpa. In fact, the seven towns and an equal number of Pueblos de Indios of Olancho were confined to the area, primarily in the higher lands, north of the Río Guayape in what is today central western Olancho. This collection of settlements forms an eastward extension of what otherwise would have been an eastern frontier that ran through the present Departments of Colón, Yoro, Francisco Morazán, and El Paraiso and would have excluded all of modern Olancho. There was probably a somewhat wider distribution of Hispanic population within Olancho, because the census notes that almost 30 percent of the non-Indian
families lived "en Valles y Haciendas" (1893:130). It would be expected, however, that
the majority of these dispersed settlers would be located in the proximity of the larger
settlements.

No settlements were reported within Olancho to the north, south, and east of the
axis of Hispanic settlement, the center of which extended from Yocón in the west to El
Real in the east. The census itself acknowledged that large numbers of Sambo and Paya
Indians were left uncounted in the Partido de Olancho and the map of the distribution of
Hispanic settlements shows that there was much territory still outside of Spanish control
in which the unenumerated natives could seek refuge. These uncontrolled gaps between
areas of Spanish influence were discernable by Davidson (1984) for A.D. 1700 and
apparently remained outside of Spanish control throughout that century. The Hispanic
settlements and Indian towns of Olancho in 1801 were located in the southwesternmost
portion of their proposed pre-Columbian region and the string of settlements from
Olanchito to Trujillo cut across the northwestern portion of their early mainland region.
The unconquered Pech territory in 1801, therefore, was comprised of the central and
eastern portions of their early mainland region.

The 1801 census also enumerated seven Pueblos de Indios in Olancho which
were intermingled with the Hispanic settlements and which contained a reported total of
1,523 Indians. The census does not explicitly specify the native culture of the inhabitants
of the Pueblos de Indios and this leaves some possibility for confusion. In the absence of
evidence to the contrary, it can be assumed that the seven Pueblos de Indios of Olancho
were inhabited by Pech. No Pueblos de Indios were reported for Trujillo and the only
one reported for Olanchito, Agalteca, lies very near the pre-Columbian border between the Pech and the Tol as proposed by Davidson. The Yoro Pueblo de Indios of Jocón lies outside of the early Pech region delimited by both Davidson and Chapman. By 1801, then, the southwestern portion of the early Pech region was heavily infiltrated and controlled by Hispanics, and Indians accounted for only 19.77 percent of the population in the 14 recorded settlements.
PART TWO: A CENTURY OF SETTLEMENT AND LAND USE CHANGE AMONG THE PECH
CHAPTER 5

The Spiritual Conquest and Early Land Entitlements

The Role of Padre Subirana

Perhaps the most important events to aid in the preservation of a region discernable as Pech in the entire post-Contact era occurred in the 1860s as a result of the work of the Spanish priest, Manuel de Jesús Subirana. Subirana is best known for his work among the Tol Indians of northeastern Honduras, for whom he acquired 21 land titles in 1864 (Davidson 1984: 453, 455). During his tenure in Honduras, however, he also worked among the Pech Indians of Olancho and, perhaps, among the Garifuna and Miskito along the northeastern coast. Subirana died on November 27, 1864 “en Potrero de Olivar, cerca de Santa Cruz de Yojoa” (Davidson 1984: 448) and is buried in the church in the town of Yoro (Chapman 1992: 19). Although not canonized, Chapman reported that, in the mid-1950s, he was venerated by many in the Tol area as the “Santa Misión” and remembered as “the Padre who conquered the Jicaques” (Chapman 1992: 17-23). Likewise, Conzemius (1928: 37) reported that the elderly Pech, in the early 1920s, held similar feelings for the priest.

Padre Subirana first visited the Pech region in 1857 on a voyage in which he traversed Honduras from Danlí to the north coast. His entire journey, as reconstructed by Davidson (1984), lasted from January of 1857 to mid-1858 and took him from
Comayagua, through El Salvador to Danlí, northeastward to the coast, and thence westward to Yoro. During that journey, in July of 1857 in the town of Juticalpa, "Subirana registra el bautismo de 700 indios payas." He returned to Olancho in 1861 and, in 1862, obtained two land titles for the Pech.

Conzemius (1928:12) claimed that the town of Culmí was founded by Subirana in 1859 beside the Río Kurmí and moved shortly after to its present location. Davidson, in contrast, believed that Subirana spent most of his time during 1859 among the Tol with possible trips to Santa Bárbara and, at the end of the year, to El Salvador and Nicaragua. Sapper (1899) indicated that the town was founded by Subirana in 1861. Fiallos (1991:303) reported that Subirana moved the settlement from Pueblo Viejo to its present location in 1820, a date that is surely mistaken given that Subirana did not arrive in Honduras until 1856 (Davidson 1984:448). Lunardi (1943:27, 30), however, reported that he had discovered evidence in baptismal records the Franciscan missionary Juaquín de Jesús Taboada y Sierra first founded the mission settlement of Dulce Nombre de Jesús de Payas in 1819, probably near the modern site of Pueblo Viejo. He believed, therefore, that Subirana merely moved the Indians from the nearby mission to what he considered a more healthful site.

Conzemius (1928:17) reported that he did not know the exact date of the foundation of El Carbón but that an elderly woman of the town told him that Subirana had founded it in the mid 1800s. Conzemius (1928:15-16) identified this settlement as San Pablo del Carbón but he described its location as that of the present village of Santa María del Carbón.
Although Honduras was no longer under the control of the Spanish government. Subirana’s work among the Indians continued to share the goals of the colonial era missionaries. Chapman (1992: 18) noted the similarities when she described his efforts among the Tol: “like the previous missionaries, he aimed to persuade the Indians to abandon their ancestral customs, settle in hamlets, build chapels and behave like civilized Christians.” In his account of Subirana’s work among the Pech, Conzemius (1928: 37) also described a process of reduction when he reported that Subirana successfully founded two settlements with relocated Indians.

Although the intention of congregating the Indians was by this time more for religious reasons rather than as labor for encomienda or repartimiento, Chapman reported that, among the Tol, it sometimes had similar consequences for the inhabitants and therefore led to the abandonment of settlements. A boom in the sarsaparilla market during the early 1860s encouraged the governor of Yoro to use soldiers to force the Tol to collect sarsaparilla roots and transport them to Atlantic ports (1992: 20-21). She noted:

Unfortunately, some of the agents appointed by Subirana to protect the Indians turned against them and cooperated with the governor, by organizing the forced labor. In the decades that followed, many Jicaques fled from their newly founded hamlets, often pursued by the governor’s soldiers, and returned to the “raw” mountains, which had always served as a refuge. (Chapman 1992: 21)

No record of such forced labor among the Pech settlements is known to this researcher and the two villages founded by Subirana remained dominated by Indians until the middle of this century when Culmí was overtaken by ladinos. In Culmí, at least, however, the Pech appear to have maintained outlying rancherías where they spent most of their time
rather than living permanently in the central settlement. The congregation of the Pech into villages, to the extent of its effectiveness, marked a change in their traditional settlement pattern of dispersed rancherías, but also provided some basis for their modern claim to the land. The titles obtained by Subirana increased the strength of their claim. The settlement at Carbón has served as a center of continuity while the settlement at Culmí served to attract ladinos who displaced the Pech. Pueblo Nuevo Subirana was then established as a new center for the Culmí area Pech.

The reduction of the Indians and the establishment of the land titles in Santa María del Carbón and Dulce Nombre de Culmí by Subirana established a core area for the Pech that has remained, although threatened, to this day. Initially, the Pech lands were isolated and removed from the municipio cabeceras. Carbon has remained an outlying aldea to this day. Culmí, however, later became the cabecera of a new municipio and the focus of ladino encroachment which further displaced the Pech.

In spite of the uncertainty of the exact founding dates of the main Pech settlements by Subirana, it is certain that each had been established by 1862, when the priest returned to Olancho and acquired legal title for their lands. Davidson (1984: 451) reported at least one previous, colonial era, title for Pech land at “Santa María de los Payas fechado en 1735 (ANH, Olancho 201),” but the titles obtained by Subirana in the independent era are the ones upon which the modern Pech base their claims. The titles obtained for the Pech by Padre Subirana were for the lands surrounding the two settlements that he is credited with founding, or at least populating with Pech, Dulce Nombre de Culmí and Santa María del Carbón.
Davidson (1984: 452) stated that Subirana returned to Culmí in 1862 "para medir dos terrenos que totalizaban 20 caballerías entre los piñares." The Culmí title is listed as Aguaniquirito, title # 16, and dated 1862 in the Olancho section of the Honduran National Archive's Land Titles index (INA 1969: 209). The Carbón title is listed as El Carbón, title # 64 and also carries a date of 1862 (INA 1969: 213). In a note on his table of Indian land titles, Davidson (1984: 453) indicated that the Culmí and Carbón titles were each comprised of two lots that totaled 20 caballerías.

Zelaya Carranza (1984: 461) reported that the 1735 land title for Santa María de los Payas was awarded to "los indios payas que se encontraban ubicados en los ejidos de los pueblos de Santa María, San Buena Ventura y San José, en el valle olanchano de Gualaco, con el fin de lograr su completa evangelización." Concerning Subirana's work in Olancho she wrote:

En el año 1858 fue fundado por el misionero, el pueblo de Dulce Nombre de Culmí, a orillas del río Kurmi en Olancho y logró reunir a los Payas en el valle de Agalta, donde obtuvo los terrenos de El Carbón en el año de 1861, con el objeto de hacerlos sedentarios, enseñarles pequeñas industrias, agricultura e incluso ganadería. (Zelaya Carranza 1984: 462)

An accurate determination of the actual locations of the four parcels surveyed by Subirana for the Pech in 1862 is not a simple matter in spite of the existence of the survey records. Difficulties arise in placing the surveys onto modern maps because of several possible sources of error including conversion of archaic units of measurement, inaccuracies in the surveying technology of the time, and surveyor error and inaccurate reporting. Nevertheless, by considering the site descriptions included within the survey records and their maps in conjunction with the possible interpretations of the historic
units of measure, it is possible to achieve a rough approximation of the locations of the various parcels (Figure 10).

Survey Placement Problems

The first difficulty to be addressed is that of translating the units of measurement used in 1862, the caballería, the cuerda, and the vara castillana, into modern terms. It is probably the easiest of the various possible sources of error to overcome. Davidson (1984: 452-454) discussed some of the difficulties involved in translating the nineteenth century units of measurement to their modern equivalents. He noted that Subirana's surveys were conducted under the terms of the agrarian laws of July 23, 1836, which defined the units of measurement to be used and the procedures to be followed for land surveys. But as Chardon (1980) has shown, the size of the units of measurement were often confused in Spanish America, and translating these units into modern terms is not a straightforward process. In the case of the Las Vegas survey, in Tol lands, the size of the caballería used in the area calculations was defined as 8.5 percent greater than the official unit (Davidson 1984: 454). This would have led to an under estimation of the total official caballerías titled to the Las Vegas inhabitants. Even when the official units of measurement were used in the surveys, however, Davidson found that the limitations of the surveying technology of the time could lead to measurement discrepancies when the surveys are compared to modern maps. He found that when the survey map of the El Carbón parcel is placed on a current topographic map of the region, the traverse enclosed an area of 8.111 caballerías, 3.35 percent greater than the reported area of 7.839 caballerías.
Figure 10. Pech lands titled in 1862 by Padre Subirana.
The 1862 land titles obtained for the Pech by Padre Subirana were awarded in areal units of *caballerías*. The survey documents reported that the cadastral surveys that determined which land was included in the titled area were conducted in the form of a closed traverse around the Pech lands. These traverses were measured in the linear units of *cuerdas*, each of which contained 50 *varas castellanas*. Later ejidal grants to the settlement of Culmí appear to have been based upon the league, which also was related to the *vara*. The basic unit of measurement used in the Pech land surveys in the latter half of the nineteenth century, then, was the *vara castellana*, which Chardon determined was equal to “3 Castilian feet” (1980: 137) and which was standardized, after 1751, at 835.905 mm (1980: 148). The *caballería*, as established by Honduras’ agrarian law of 1836, was equivalent to a rectangle measuring 22 *cuerdas* (of 50 *varas castellanas* each), 36 and one-half *varas* in length and half as wide (Davidson 1984: 452). The league, like the *vara*, had a number of European variants but, because it was the official unit of measurement in Spain during the discovery and initial conquest of the Americas, the *legua legal* of 3 miles, 15,000 Castilian feet, or 5,000 *varas* “formed the basis for the Spanish land league in North America” (Chardon 1980: 137) and appears to have been the league used in the Culmí ejidal surveys of the 1890s.

Two other factors that affected the accuracy of the nineteenth century surveys can also be mentioned: the uneven terrain and the nature of the distance-measuring instruments. When linear measurements are made along the ground in mountainous terrain, of course, a larger distance is measured than is actually traversed in a plan view. Thus, the area calculated should be greater than the area calculated from a plan view.
map of the survey stations. Davidson (1984: 454) also noted that the distance-measuring instrument used (the *cuerda*) could experience slight changes in length from day to day, or perhaps even during the course of a day's work, depending upon the atmospheric conditions. It is probably not possible to account for such changes in the instrument when reconstructing the surveys on modern maps.

Even given the slight uncertainties regarding the units of measure employed, the limitations of the survey instruments, and the difficult terrain which was being surveyed, however, the problems encountered when attempting to place the surveyed parcels on modern topographic maps lead one to suspect that other sources of error are present, including perhaps Chardon's suggestions of "errors in field surveying, intentional misinterpretations, or individual idiosyncracies" (1980: 149-150).

**Pech Lands Surveys of the 1800s**

For the purpose of obtaining an idea of the extent of the Pech region in the latter 1800s and early 1900s, we will consider several cadastral surveys granted in eastern Olancho during that time. The survey records available for analysis include the maps and official descriptions of the surveys found in the Land Titles section of the National Archives of Honduras. Unfortunately, however, not all of the original documents were available to this researcher. For some of the parcels the descriptions and maps were available, for others only the survey maps, and for others only brief descriptions of the documents provided by other researchers were available to provide indications of the parcel locations. The land surveys to be considered include the 1862 surveys commissioned by Padre Subirana, which encompassed two parcels each for the Pech in
the vicinities of El Carbón and Culmi, two surveys of the ejidal lands of Culmi conducted in 1892 and 1897, and the survey of the ejidal lands of Río Tinto conducted in 1875.

The distance measurements of these surveys were based upon the vara, but were most commonly recorded in units of the measuring instrument known as the cuerda and the grants were usually awarded in the areal unit of caballerías. The 1862 surveys used a cuerda of 50 varas but by the 1892 survey a cuerda of 25 varas was used and this unit was also referred to as a cadena, or chain. Stokes noted that:

the caballería itself was an extremely vague unit of land measurement. As no careful surveying had been done anywhere in Honduras prior to 1830, a caballería varied from 200 to 700 acres. Instrument surveying revealed that the unit contained 110.9 acres, and as such it has come down to the present. (Stokes 1947: 151)

Based upon the official description of the caballería from Article 2 of the 1836 agrarian laws of Honduras, Davidson calculated that it should contain 645,816.12 square varas castellanas, or, using the 835.905 mm vara that became official in 1849, 451,255.7 square meters. This equals 45.12557 hectares or 111.50529 acres, about 0.5 percent larger than that reported by Stokes. Stokes’ 110.9 acre caballería equals 44.88123 hectares, or 448,812.3 square meters.

Two types of apparent errors pose difficulties in actually locating the surveyed parcels on the map. The first is the inaccuracy of the survey measurements themselves. These errors are seen when the traverse fails to close itself. The second type is the discrepancy between the recorded measurements and the descriptions provided in the text or on the survey maps of the territory encompassed by the survey. Although the surveys were recorded as a series of, typically very few, straight-line distance and
bearing measurements, the descriptions often mention landmarks passed along the traverse or boundary demarcating features that cannot be made to agree with the recorded measurements. Of course, many places and features mentioned in the descriptions cannot be identified today, but when those that can be identified are compared to the recorded measurements, substantial conflicts often present themselves. Frequently a plot of the instrument survey cannot be made to agree with the metes-and-bounds landmark descriptions. In such cases, one must decide whether to accept the measured area or the described area as the best representation of the titled lands. The titles were granted for a quantified area with a certain assessed value, but they also were granted for a specified site that contained natural features, settlement sites, or utilized lands within the described limits. The best that we can hope for, therefore, is to gain some vague understanding of the locations of the Pech lands surveyed from 1862 to 1897 to serve as an indication of the partial extent of their region at the time.

The first lands surveyed for legal title for the Pech under the guidance of Padre Subirana were in the Culmí valley. Two parcels were surveyed in the valley, the Aguanquirito site and the Flores site. Research notes from Davidson’s review of the document show that the larger Aguanquirito site was surveyed first, with the vista de ojos, or initial examination of the site, conducted on January 2, 1862 and the actual survey conducted on January 3. The survey map from the document noted that this parcel contained a total area of “trece Caballerías un Octabo noveinta y cinco cuerdas, dos cientos diez baras, y cuatro quartas quadradas” (ANH 1862a). The survey description provided by Davidson indicated that the traverse began at the Quebrada de
Majastre and proceeded south for a distance of 40 cuerdas of 50 varas castellanas each. passing Quebrada Pozo Hondo and Río Aguaquire, until it reached the road coming from Río Tinto. It turned toward the east for 69 cuerdas to a place identified as las Hicoteas and thence northward for 50 cuerdas, again crossing the Río Aguaquire, where it reached a road that traveled between Hicoteas to Pueblo Viejo. The survey then traveled westward, crossing the road from Pueblo Viejo to La Criba at its intersection with the road from de Agalta, to a spot near Quebrada del Barro at a distance of 59 cuerdas. The survey then returned to its origin, a few cuerdas between Quebrada del Barro and Río Aguaquirite.

The distance and bearing measurements related by Davidson are confirmed by notations on the parcel map, with the additional stipulation that the length of the final leg of the traverse measured fifteen cuerdas (ANH 1862a). The area encompassed by the parcel thus plotted is 5.957 km², which equals 5,957,000 m² or 595.7 hectares. Using a conversion factor of 45.125 ha per caballería, then, the area of the Aguanquirito parcel contains 13.2011 caballerías. The survey measurements agree well, therefore, with the area titled. The measurements and area do not, however, appear to agree with the lands described as included within the traverse. The locations of some of the places mentioned in the description do not appear on the most detailed maps available but others are represented thereon and it is not possible to place a parcel of the dimensions given on a modern map so that it encompasses the places mentioned in the survey description that are identifiable today. Likewise, the 13 caballería parcel cannot be placed so that it simultaneously extends its southern border south of the Río Aguaquire and encompasses
the nucleus of the town of Culmi. It seems highly likely that a land title acquired specifically for the Pech by Padre Subirana would have included the very settlement that he is credited with establishing for them within the preceding few years. The intended inclusion of pueblo Culmi is even more likely in light of Davidson’s (1984:452) report that Article 16 of the 1836 agrarian laws required that “al medir debe tratarse de ubicar al pueblo en el centro de las tierras medidas.” Of course, the Pech grant could not have included Culmi itself if the surveyors intended to reserve ejidal lands surrounding the town, but this seems unlikely. Stokes reported that provisions for the granting of two square leagues of ejidal lands to each pueblo were first made in 1836 (1947:151) but the Pech attempted to take advantage of this provision in the 1890s as a means of achieving secure tenure over the lands for themselves. There would be no need therefore to exclude Culmi from the 1862 survey. Finally, the description that the survey crossed a road that connected “Pueblo Nuevo y la Criba” provides a firm indication that the survey party did indeed traverse the northern boundary of the parcel to the north of present day Culmi.

The Aguanquirito survey description can be interpreted to include Culmi, albeit only by ignoring completely the instrument measurements and delimiting a territory on the basis of the known or probable locations of the mentioned places and, in the process, greatly expanding the area of the parcel. Such an expanded area would extend from Quebrada del Barro, probably in the vicinity of Las Casitas or Plan de La Garza, southwestward across the Río Aguaquirito, Quebrada Majastre, Quebrada Pozo Hondo, and Río Aguaquire. It would then trend southeastward an indeterminate distance along
the higher lands between the Río Aguaquire and Quebrada de Las Icoteas and then northward or northeastward across Río Aguaquire. The parcel boundary would then return, in a northwestward direction, to its origin at Quebrada del Barro. This metes-and-bounds reconstruction of the Pech lands as described in the survey report is vastly different from the parcel delimited by the survey's own distance and bearing measurements but, although inexact, encompasses the features mentioned by the survey party as the limits of the parcel.

The second parcel surveyed for the Pech in the Aguanquirito title was the Flores site and an accurate estimation of its size and location is complicated by deficiencies similar to those seen in the Aguanquirito site. The Flores site was a triangular parcel totaling “siete caballerías un octabo quinse cuerdas setenta y ocho v~. y catorze cuartas cuad~.” (ANH 1862a). The survey measurement was conducted on January 5, 1862.

The survey traverse began at the confluence of the Ríos Aguaquire and Wampú and proceeded “Al Norte con 58 Cuerdas” along the Ríos Wampú and Culmi (Pueblo Viejo) to the Hondura de la Danta. It turned “Al Oeste Sur Oeste con 64 Cuerdas,” across the Quebrada del Guajiniquil, to Enojos and then proceeded back to its point of origin “Al S.E.4ª. al S.E con dos gradas de declinacion sobre el S.S.E con 66 Cuerdas,” following the Ríos Aguaquirite and Aguaquire most of the way.

Although the traverse was composed of only three legs, a plot of the distance and bearing measurements recorded on the site map reveals a substantial error of closure. Ignoring the bearing measurements reported in the survey, a triangle constructed with legs of the three distances recorded results in an area of 2.955 km², 295.5 ha, or
6.548476 *caballerías*, somewhat smaller than the more than seven and one-eighth *caballerías* reported by the surveyors.

As in the case of the Aguanquirito parcel, the Flores parcel is not large enough to encompass the described territory. This survey provides a certain starting point at which to locate one corner of the triangle, the confluence of the Río Aguaquire with the Río Wampú, and a plot of the survey measurements does include the area identified on the map as Las Flores. The confluence-to-La Danta leg, however, is not long enough to reach the area known today as La Danta. Nor does the La Danta-to-Enojos leg reach the Quebrada del Guajiniquil, much less the more distant Río Aguaquirito. And, obviously, the Enojos-to-confluence leg cannot span the distance from Río Aguaquirito to the mouth of the Río Aguaquire. Because of the fewer number of places mentioned in the survey description, the greater proportion of those places that are identifiable today, and the originally intended triangular shape of the Flores site survey, it is relatively simple to propose a larger triangular parcel that would roughly conform to the 1862 metes-and-bounds description. Such a parcel would simply extend from the confluence of the Ríos Aguaquire and Wampú to La Danta, near the intersection of the road to Honduras Plywood mill with the Culmi-Pisijire road, turn southwestward, crossing the Quebrada del Guajiniquil, to the Río Aguaquirito, and finally follow roughly the Aguaquirito and Aguaquire back to the original point at the confluence. The parcel thereby delimited, however, would be substantially greater in area than the stated title area and could conceivably overlap the Aguanquirito site as delimited by its landmark descriptions.
Following the surveys of the two Culmí valley parcels, Subirana proceeded across the Sierra de Agalta to survey two other parcels for titles for the Pech of the Agalta Valley. The documents of the El Carbón title indicate that Padre Subirana had arrived in San Esteban by January 8, 1862 to arrange for the Pech land surveys. Two sites were chosen to title for the Pech, Boca de la Montaña and El Carbón. The vista de ojos for the Boca de la Montaña site took place on January 10, and the actual survey was begun the next day. The surveyors moved on to El Carbón on the fourteenth of January and conducted the vista de ojos that same day. The El Carbón survey took place on the fifteenth of January.

A transcription of Subirana’s original 1861 petition and the subsequent measurement and granting of title to the Pech of El Carbón from the National Archives (ANH 1862b) is included in the Instituto Nacional Agrario’s (INA) land title solicitud No. 21079, Tribu Pech Paya. This transcription was produced in 1965 as a certification of the existence of the 1862 title by the director of the National Archives and was certified as being recorded as entry No. 80 on “Páginas de la 93 a la 105 del tomo XIII del Registro de la Propiedad del Departamento de Olancho” on January 25, 1967 (INA solicitud 21079: 25).

Subirana had been promised 300 pesos by the government of Honduras “para las hermitas de los indios.” It was decided to pay him “en tierras para los mismos en el lugar que yo las pida en este Departamento” (INA solicitud 21079: 11). Subirana’s original request on December 11, 1861 to the Intendencia de Hacienda of Olancho was for the measurement of seven caballerias of land in the “valdío llamado el Carbón en el
Valle da Agalta ... jurisdicción de S. Esteban” (INA solicitud 21079: 11). Two witnesses testified that the Carbón lands were indeed national lands not claimed by other persons. On the eighth of January, 1862 Subirana amended his request to include two parcels of land for the Pech. He asked that seven caballerías of land be surveyed beginning at the Quebrada de las Piñas, which marked a portion of the boundary of San Esteban’s ejidal lands, in addition to “todo el ocotal del Carbon” (INA solicitud 21079: 14). This request was made because the Pech could not raise cattle at Carbón because of the presence there of “las milpas y los tigres” (INA solicitud 21079: 14). The Quebrada de las Piñas parcel was at a place called Boca de la Montaña and a party that went to inspect the site prior to the survey reported that “era un serranía de unos serros ocotalosos con pocos montes pra cultivar, bueno unicamte. pra. la cria de ganados” (INA solicitud 21079: 15).

From the eleventh to the thirteenth of January the surveying party, including surveyor Guillermo Herrera, his assistants, Padre Subirana, and representatives of the Pech and the citizens of San Esteban, surveyed, mapped, and calculated the area of Boca de la Montaña. The survey began at the confluence of Qda. de las Piñas and Río Conquire and proceeded upstream along the Río Conquire on a bearing of “N.E. 4ª. al E.” for 44 cuerdas of 50 varas castellanas, where they encountered the mouth of the third quebrada to meet the Conquire. The survey followed this nameless tributary upstream along a bearing of “N.P.4ª. al O.” Above the source of the stream, they entered “una sabaneta don hay unas viviendas de Payas, las que quedaron dentro esta medida.” Continuing along the same bearing, the survey crossed a pass and descended
to the Qda. de las Piñas. The distance along this bearing from the Río Conquire to Qda. de las Piñas was recorded as 48 cuerdas. The survey turned in the downstream direction of Qda. de las Piñas, following a bearing of “bueitos pra. el S.S.O.” until it reached Laguna Escondida, “donde hase declinacion enterante. la quebrada,” a distance of 40 cuerdas. From the bend in Qda. de las Piñas, the survey continued downstream along the Qda., following a bearing of “S.E.4°. al E.” for a distance of 41 cuerdas, where they returned to its confluence with the Río Conquire and the traverse was closed. The total area within the parcel surveyed, as calculated by the surveyor, was “siete caballerías - un cuarto siento nobenta cuerdas ochenta y tres baras y cuatro cuartos cuadradas” (INA solicitud 21079: 17).

The initial inspection of the lands of El Carbón took place on January 14, 1862 and reported that “era un plano pequeño de unas lomitas cubiertas de pinales, y todo el (todo el) rodeado de montañas crudas y hasperas, propio unicamente - pra la labor” (INA solicitud 21079: 18). The El Carbón lands were surveyed on the fifteenth of January, beginning “en la orilla del Río de la -- agua amarilla frente al serro del corosal” (INA solicitud 21079: 18). The survey then proceeded upstream along a bearing of “Sur P. 4°. al O.,” past the confluence with the Qda. del Carbón, to the place where the road to San Esteban crossed the Agua Amarillo, a distance of 56 cuerdas of “50 baras castellanas” (INA solicitud 21079: 18-19). A mojon was placed on the left side of the river. The survey then followed a bearing of “N.P. 4°. al N., siguid la medida por una quebradita pequeña, y por el pie de unos serros grandes que quedaron fuera de la medida, entramos á la montaña, y por ella s’e fué caminando hasta llegar donde atractuesa
el camino real que bá pra Trujillo y a orillas de este y de la espresada quebrada mande
Aser un mojon de piedra y poneré cruz por - señal, y contadas las cuerdas uvo sincuenta
y cuatro” (INA solicitud 21079: 19). The survey then followed a bearing of “N. 4º. al
N.E.” to the foot of Cerro Corozal, crossing the Qda. del Carbón and another small
stream along the way, for a distance of 15 cuerdas. The survey turned “E.S.E. corrio la
cuerda, por arriba de la falda del referido serro del corozal, y -- habiendo bajado á este
entramos á una Montañuela por la cual fuimos caminando hasta llegar á orillas del Rio
ahonde se hizo el primer mojon”, a distance of 78 cuerdas (INA solicitud 21079: 19).
The area enclosed by the El Carbón traverse was calculated as “siete caballerías tres
cuartos dosientas tres cuerdas, siento setenta y cinco baras, y una cuarta cuadrada” (INA
solicitud 21079: 20).

The Pech lands of municipio San Esteban were assessed to have a value of “dies
ps. plata á cada caballería” (INA solicitud 21079: 24), which, at under 16 total
caballerías, was about one half of the 300 pesos worth promised to Subirana. No
additional financial arrangements had to be agreed to, therefore, as a result of Subirana’s
request for the additional survey of the Boca de la Montaña parcel for the Pech.

The plot of the Boca de la Montaña survey measurements shows a significant
error of closure but, unlike the two Culmí Valley surveys, and given the uncertainty of
the northern boundary line that was surveyed, the measured area appears to be roughly
large enough to encompass the territory described in the survey record, depending upon
interpretation of the description. The survey description of the Boca de la Montaña site
provides identifiable boundaries for much of the parcel. The traverse began at the
confluence of the Quebrada de Las Piñas with the Río Conquire and followed these two streams at its beginning and end. The lands surveyed, therefore, lie primarily between the Quebrada de Las Piñas and the Río Conquire and the only boundary that is unclear is the northern one which leaves the Conquire at the mouth of a small tributary, travels through a small savanna, crosses a pass in the hills, and arrives at the Quebrada de Las Piñas. None of the tributary streams shown on the 1:50,000 scale topographic maps of the area accurately fit the description and measurements given in the survey documents. The intermittent stream that is the first tributary to the Río Conquire along the survey route shown on the map probably best fits the parameters provided in the documents but accepting that stream as the boundary delimiter produces a mapped parcel with a total area that is smaller than the area titled to the Pech of Boca de la Montaña. This would be contrary to the trend seen in the Culmí Valley surveys of mapped parcel descriptions exceeding the titled area.

The final parcel surveyed by Subirana in 1862 for Pech land titles was the El Carbón site. Like two of the previous 1862 surveys, the El Carbón measurements plot shows a substantial closure error and, like the Culmí Valley parcels, the area titled does not appear to be large enough to encompass the area described. The parcel was bounded on the north by Cerro Corozal or Corocito and on the east and southeast by the Río Agua Amarilla. The traverse left the Agua Amarilla at the point where the road between El Carbón and San Esteban crossed it and proceeded northward to the area where the road to Trujillo crossed the headwaters of the Quebrada del Carbón, and then turned northward to arrive at the foot of Cerro Corozal. Placement of the southwestern
boundary, between Río Agua Amarilla and Quebrada del Carbón, is complicated by inaccuracies found on the modern topographic map. The Quebrada del Carbón is shown on the map as much shorter than it is in reality so that it never reaches the road to Trujillo and its headwaters are incorrectly shown to be part of the upper reaches of a stream that flows southward to the Río Sangro. Such a configuration makes a plausible interpretation of the survey description much more difficult and problematic. If the western boundary connecting the Agua Amarilla and Cerro Corozal is made to pass through the headwaters of the Quebrada del Carbón as mapped on the 1:50,000 sheet, the actual settlement of El Carbón is necessarily excluded from the titled parcel. As was mentioned in the case of the Aguanquirito parcel in the Culmi Valley, the exclusion of a Pech settlement founded by Padre Subirana from the land title survey that he initiated seems highly unlikely. Fieldwork as well as the 1989 title survey conducted by Instituto Nacional Agrario have shown that the Quebrada del Carbón does extend far enough westward to meet the road to Trujillo and, although the recorded measurements do not appear to be valid, the site description fits quite well with a corrected topographic map and includes the settlement within its boundaries. A straight line from the crossing point of the old road at the Agua Amarilla to the headwaters of the Carbón passes along the foot of Cerro El Carbón, which agrees with the survey description of this leg of the traverse following the foot of some large hills that were not to be included in the Pech lands. A plot of the metes-and-bounds description of the survey using the corrected topographic map also roughly preserves the relative proportions or overall shape of the El Carbón parcel as measured and plotted in 1862. It also shows that the survey party
largely fulfilled Padre Subirana’s request to “medir para los dichos indígenas todo el
ocotal del Carbon” (INA solicitud 21079:14) by measuring the roughly triangular
shaped, low-relief basin bottom drained primarily by the Quebrada del Carbón.

The four parcels of eastern Olancho titled to the Pech under the guidance of
Padre Subirana in 1862 cannot be taken to represent the complete territorial extent of
Pech habitation in the mid 1800s. Two of the four contained congregated settlements
that Subirana is traditionally credited with having established. Conzemius reported that
Culmí was settled with Pech from the surrounding mountains while El Carbón was
settled by Pech from the lower Río Sico (1928:37). The remaining two parcels also
indicate a Pech presence in the vicinity of the two major settlements prior to Subirana’s
work. After 1862, at least, the Culmí-El Carbón area, on the basis of its two large
settlement foci, can be considered to be the zone of greatest Pech population
concentration or the nucleus, although probably not the geographic center, of the Pech
region. Undoubtedly, Pech continued to live in dispersed rancherias or small
settlements and utilize lands away from the two largest congregations. As we shall see,
in the early and middle twentieth century the Pech occupied several settlements to the
east and north of the nuclear zone. An Indian presence is also seen west of the nuclear
zone in census statistics and reports, but the exact ethnicity of these Indians is often
unclear. The congregated settlements credited to Subirana, then, provide a minimum
delimitation of the westward extent of a predominantly, although not exclusively, Pech
region during the latter 1800s.
During the 1890s the Pech of Culmí took advantage of the Honduran government’s policy of granting ejidal lands to towns to again attempt to acquire a more secure tenure over their lands. Conzemius (1928: 13) reported that Culmí was established as its own municipio in response to Pech complaints about unspecified abuses on the part of the authorities in Catacamas. This took place on June 30, 1898 (Fiallos 1991: 303). Initially in 1836, and again after 1870, national land could be granted free to the pueblos for ejidos. Between 1854 and 1870, however, the pueblos “were required to pay for them” (Stokes 1947: 151). Perhaps the requirement that ejidal lands be purchased, which was in force at the time of the 1862 surveys, was the impetus for the decision to seek titled parcels rather than ejidal lands for the Pech at that time. Subirana apparently had been given the equivalent of 300 pesos worth of land for the Olancho Pech. He initially requested seven caballerías of land in the Agalta Valley but eventually surveyed a total of over 15 caballerías. One caballería as defined in 1836 contained 645,816.125 square varas. One square league, therefore, contained 38.71 caballerías. Even a one square league ejidal grant then, much less the standard two square leagues of the time, would have exceeded Subirana’s allotted Pech territory. The decision to seek title for two parcels of land occupied by the Pech in each valley, therefore, aimed to secure tenure over the lands then utilized by the Pech while remaining within the parameters of Subirana’s agreement with the Honduran government.

Later, after the requirement of payment for ejidal land had been rescinded, the Pech of Culmí did apply for ejidal lands for their town. Two grants equivalent to two
square leagues were awarded to Culmí, with the first apparently having been lost for a
time. The earlier ejidal grant to Culmí is indexed as Olancho title number 62, Dulce
Nombre de Jesus (ANH 1890). The town was granted 5,000 manzanas of ejidal land,
which was surveyed in 1892. The manzana is an areal unit equal to a square 100 varas
on a side, or 10,000 square varas. The 5,000 manzanas awarded, then, was equivalent
to 50,000,000 square varas, or two square leagues. The measurements recorded on the
survey map show that the survey was measured in cuerdas or cadenas of 25 varas
castellanas each. This marks a change from the 50 vara cuerda used in 1862.
According to the measurements, the ejidal plot was laid out in a rectangle 400 cadenas
long by 200 cadenas wide and was aligned to the cardinal directions. The landmarks
noted on the map, however, do not agree with the recorded distance and bearing
measurements. Extrapolating from the two most definite reference points along the
ejidal boundaries, the Loma del Sopilote at the southwestern corner and the confluence
of the Ríos Pueblo Biejo and Guampucito at the midpoint of the eastern boundary, a
rectangular parcel encompassing the described landmarks at their described location
would have an area of 166,409,909.6 square meters or 166.4099096 square kilometers
and its long axis would be oriented southwest to northeast. The landmark notation at
the northwestern corner of the boundary is not intact on the survey map but no
identifiable features matching the initial indication of “Cerro de Peri-----” appear on the
map. This corner demarcator would appear to be different than the later corner
landmark of Cerro de Chicaltepito utilized by the 1898 survey. The 1892 survey does
note, however, that the western boundary follows the "Orilla de la montaña," which is also the case with the later Zopilote–Chicaltepito line.

A second ejidal grant was made to Culmi at the time of the creation of the new municipio of Culmi in 1898. This title is listed as Olancho number 54, "Culmi" in the national archives land title collection (ANH 1898). On July 10, 1897, the governor of Olancho, Francisco Calix, and the alcalde of Culmi, Leandro Duarte, again requested that the Honduran government survey ejidal lands for Culmi since the original petition records, or expediente, had been lost. Five thousand manzanas, or two square leagues, was again awarded to the town and this time the survey measurements show a better, although not perfect, fit with the landmarks shown on the survey map. The survey was conducted in mid July and the ejidal lands were mapped directly in varas as the unit of linear measure. The ejido parcel was laid out in a rectangle measuring 10,000 varas by 5,000 varas, with the western boundary extending from Cerro Chicaltepito to Cerro Zopilote. This parcel is therefore easily placed on modern maps and the western boundary proves relatively accurate, although it must be aligned somewhat more southwest to northeast than is indicated be the recorded measurements. Other portions are more problematic, however. The map indicates that the ejidal lands extend across the Río Pueblo Viejo in the northeast into the Pueblo Viejo savanna. Comparison with the modern map, however, shows that, while a distance of 5,000 varas of 0.8359 meters is sufficient to cross the Río Pueblo Viejo in the vicinity of the settlement of Pueblo Viejo from Cerro Chicaltepito, the northern side of a rectangle aligned between Chicaltepito and Zopilote would not cross the Río Pueblo Viejo until a point several
kilometers downstream from the settlement. The rectangular two square league plot does encompass the town of Culmi and can therefore be accepted as the minimum parcel intended to be granted. A parcel that includes the Pueblo Viejo area, as can justified by the metes-and-bounds description, would not be rectangular and would encompass an area larger than the titled 5,000 manzanas. The Director General de Rentas of Honduras recorded a receipt for 100 pesos, which would be equivalent to the "2 centavos per manzana" surveying fee established in 1888 (Stokes 1947: 152), charged to Culmi for the ejidal lands on June 22, 1898 after which the ejidos were granted and the town was incorporated as a "Corporación Municipal."

A distinction should probably be made at this point between the Pech land titles awarded in 1862 and the Culmi ejidal grant of 1898 in terms of current Pech claims to the land. The Pech of the Culmi Valley seem to consider the ejidal lands rightfully theirs and that, as ladinos have risen to power in the municipio, they have been alienated from land that was intended for them. The Pech believe that, since the Pech controlled Culmi at the time and it was they who requested the ejidal lands for the town, the ejido lands were in effect a land title for the Pech. Ladinoization of the town has led to both the Pech loss of solares within the town as well as control over the ejidal lands surrounding the town. As ejidal lands were awarded to the town, however, it is understandable that the Pech loss of political control in Culmi has led to loss of control over the ejidos. Pech solares in town were either abandoned or sold to ladinos. The earlier 1862 land titles acquired with the assistance of Padre Subirana probably represent stronger evidence upon which the Pech can base a claim to at least some of the lands in the Culmi Valley.
Of course, the apparent partial overlap of the 1862 Aguanquirito title with the 1898 ejidos would mean that any Pech claim to the earlier titled land would likewise entail a claim to portions of the ejidal lands, including, according to the metes-and-bounds description, the town itself.

It is probable that the Pech felt that the ejidos gave them claim to and control over the land and ejidos were less expensive to acquire than titles. The lands titled in 1862 were valued at 10 pesos per caballería. At 64.58 manzanas per caballería, the cost per manzana for the 1862 lands was 0.1548 pesos per manzana. After 1888, however, state-owned lands known as “Baldios were also sold to individuals or communities by public auction, the prices ranging from 50 centavos per manzana for pasture lands to 1 peso per manzana for agricultural land” (Stokes 1947:152). Ejidal lands, on the other hand, were granted free after 1870, although the community apparently was assessed the “2 centavos per manzana” (Stokes 1947:152) surveying fee. During the 1890s, then, ejidal lands were cheaper to acquire than individual or community titled lands and, since the Pech dominated numerically and politically in Culmí, it therefore made good sense to pursue ejidos as a means of securing tenure over lands for the Pech. With a change of political power in the municipio, however, the Pech lost control over the ejidal lands.

The work of Subirana in the early 1860s and the Culmí ejido grants awarded at the request of the Pech in the 1890s establish the importance of this area within the Pech region in the latter half of the nineteenth century. The Pech presence was not, however limited to the territory covered by the various land titles and ejido grants. Conversely,
the area does not appear to have been exclusively inhabited by the Pech. This is in part implied by the very need for the Pech to acquire an officially recognized claim to the land in the form of titles and ejidos. Although not mentioned explicitly in the materials currently available to this researcher, the desire on the part of the Pech for a more secure tenure implies that ladino presence in the area at the time must have been sufficient to allow the Pech to at least foresee a coming conflict over land ownership or access to necessary land. Certainly the process of territorial reduction which they had experienced since the arrival of the Spanish provided a significant example of what they could continue to expect in the future. The Pech region had already been substantially reduced since Contact and several sources provide evidence that Honduran society was already reaching into the Pech core area. Prior to and around the turn of the century, then, the Pech dominated their core area and their region, in terms of occupation and land utilization, extended eastward from the core and away from the frontier. Several indications in the Pech land titles as well as other titles indexed by the national archives show that the national society bordered the Pech just to the west and that the ladino presence had already begun to infiltrate the Pech core.

In the Agalta Valley, the survey description of the Boca de la Montaña site states that the Quebrada de las Piñas, which marked portions of the parcel boundary, also demarcated a portion of the ejidal lands of San Esteban (INA solicitud 21079: 15-17) and several other land titles from the 1800s in the “distrito de Agalta” are listed in the Olancho section of the Indice General de Titulos de Tierra (INA 1969). In the Culmí Valley, an ejido grant for San José de Río Tinto (ANH 1878) reviewed by Davidson,
which was surveyed in 1875 prior to either of the two existing Culmí ejido grants. nevertheless indicated that its lands bordered on the ejidal lands of Culmí. The 1887 census recorded a population in Río Tinto that was overwhelmingly ladino. Land title evidence also indicates that ladinos occupied lands to the northeast of Culmí by the turn of the century. Olancho title number 43, La Colonia, awarded over 1,803 manzanas to J.M. Amador and Emiliano Muñóz in 1896 (INA 1969: 211). This document has not been reviewed but the index states that it is in “el distrito de Catacamas” which included the municipio of Culmí until 1898. The index also reports that Emiliano Muñóz received title to 10,166 manzanas of land in the same area in 1901 (INA 1969: 214, Olancho title #78, Guampu y Pisijire). The Guampu y Pisijire title was dated 1897 and encompassed 6,744 square meters along, and all the land between, the Río Wampú and a western tributary, possibly the Quebrada del Cacao, extending upstream from their confluence, which is just downstream from the confluence of the Ríos Negro and Wampú.

The Census of 1887

Subirana’s choice of lands surrounding and near Culmí and El Carbón indicate that these were areas of important Pech population concentration. Subirana himself had played a role in congregating the Indians into the two main settlements, but they were apparently drawn from the surrounding countryside, in the case of Culmí, and perhaps from farther away in the case of El Carbón. The 1801 census indicates that at the beginning of the century Indians had dominated in settlements farther west such as Catacamas, Jano, and Guata. Davidson (1984: 448) noted that Subirana had reported the baptism of some 700 Pech in Juticalpa in 1857 and that on the same mission he
"encontró la mayor concentración de payas" in the area of Culmí (1984:452). The core of the Pech region, therefore, was apparently centered on Culmí in the 1850s, but there is evidence to indicate a continued Pech presence slightly to the west at the time. The 1887 census, however, indicates a substantial Indian presence to the west that is difficult to understand.

The Honduran census of June 15, 1887 provides a more detailed view of, and raises, in light of other reports around that time, a few questions regarding, the population characteristics of eastern Olancho near the end of the nineteenth century. The census categorized the population according to race and sex and thereby provides an indication of the distribution of indigenous inhabitants across the department as well as within the Indian-dominated municipios. The issue of identification of Indians becomes important, however, because a very high percentage of the population is classified as Indian in three municipios, San Francisco de la Paz, Jano, and Guata, that, while there are indications that these were Indian in the early part of the century, none are mentioned as centers of Pech population during the work of Subirana at mid-century nor by researchers at the end of the century and early in the twentieth century. The 1801 census included a discussion of the misidentification of Criollos or ladinos as Españoles. Although not addressed specifically by the census, it appears that the 1887 census may have suffered, at least in the case of these three municipios, from the misidentification of ladinos in these historically Indian areas as Indians.

The 1887 census does specifically address the omission of some of the population of the easternmost part of the country, La Mosquitia. Sovereignty over La Mosquitia
and the Bay Islands was ceded to Honduras from Great Britain in the Wycke-Cruz treaty of 1859 (Fiallos 1991: 225-228; Argueta 1990: 49; Davidson 1974: 131) and Vallejo (1893: 97) reported that la Mosquitia remained almost completely unknown to Honduran authorities until a study commission from the Department of Colón visited the region in 1882, shortly after the creation of the new Department in December of 1881 (Vallejo 1893: 93; Vallejo 1888: 177; Fiallos 1991: 57). The isolation and lack of effective control over the eastern territory almost thirty years after it was returned to Honduras is evident in the census' report on the difficulties encountered during the effort to enumerate its inhabitants. Upon receipt of the census data from Trujillo, it was noted that many known settlements in la Mosquitia had been omitted and a request was made for the lacking information (Vallejo 1888: 180). The governor in Trujillo then sent supplemental information that had been gathered during the previous year and explained that the little time allowed in which to conduct the census, in light of the difficulties of travel in the region and the lack of literate people to conduct the census, had prevented its successful completion. Although this previously collected data contained population figures, it still lacked much specific information that the census had been designed to gather, such as the nationality and religion of the inhabitants. In spite of the report that the government in Colón sent additional, if incomplete, data to Tegucigalpa, most of the locations for which missing data were specifically requested do not appear in the census tabulations.

The census data reported by Vallejo for municipio Trujillo, therefore, must be viewed as incomplete. The relatively high proportion of indigenous population recorded
in the locations that were enumerated, however, is most likely as accurate a reflection of reality as would be expected to have been achieved in other parts of the country. Thus the impression given by the 1887 census of municipio Trujillo as an important area of Indian occupation can be accepted. Indeed, the vast size of the territory included within the municipio contributes to a very probable underestimation on the part of the census of the proportion of indigenous inhabitants in its easternmost portions. Because the settlements that were omitted were located in the eastern part of the municipio and were therefore more likely to have been predominantly Indian, their inclusion would be expected to have increased the indigenous proportion of the municipio's population. Further, the towns with the greatest numbers of ladino inhabitants were located in the northwestern part of the municipio, within the limits of the present Department of Colón, and their contribution produces an overall lower indigenous percentage for the municipio. In reality, the census shows that population of the western part of the municipio, corresponding to modern Colón, was predominantly ladino while the population of its eastern portions, corresponding to modern Gracias a Dios, was predominantly Indian.

Nationally, the Indian population of Honduras as enumerated in the 1887 census had been greatly reduced in terms of both total numbers and as a percentage of the total population in the 485 years since Contact. This comes as no surprise, given the numerous works that have estimated the magnitude of Indian depopulation during and after the Conquest and the obvious fact that Indians accounted for 100 percent of the population prior to Contact. Newson (1986: 333) presents a graph showing a slight
recovery in the total Indian population of Honduras by the end of the Colonial Period to a total of 62,692 persons around the beginning of the nineteenth century, including some 27,000 Indians outside of Spanish control, which she derived “from the 1804 census and other estimates” (1986: 312). The 1887 census recorded a total Indian population for the country of 63,494. When comparing this figure to Newson’s data from the beginning of the century, one must remember that many Indians had probably become acculturated to ladino society during the interim and that Newson included an estimate of Indians outside of Spanish control but probably did not count Zambos-Miskitos among them. Indian population during the period was on the one hand diminished by assimilation and on the other augmented by the addition of Miskitos to the count, to say nothing of the role of natural increase or decrease.

At the time of the 1887 census, Honduras was divided into 210 municipios. Vallejo’s reproduction of the census is missing data for seven municipios in the department of Intibucá. The Indian portion of the following summary is, therefore, based only upon the remaining 203 municipios and both total and percentage Indian figures would certainly be higher if the Indian populations of the seven Intibucá municipios were included.

The census recorded a total of 63,494 Indians in the 203 municipios which accounted for 19.129 percent of the total enumerated population of 331,917 in all 210 municipios. The indigenous population was not distributed evenly across the country, of course, and the greatest concentrations were found in the eastern part of the country, the former Taguzgalpa, and in the southwestern highlands, which formed part of the pre-
Columbian Lenca region (Figure 11). The mean Indian population of the 203 municipios was 312.778 and the median was 50. Twenty-five municipios did not register a single Indian resident, while 21 municipios registered over 1,000. The municipio of Langue, located near the El Salvador border in what was then part of the department of Choluteca and today the department of Valle, recorded the greatest total indigenous population with 2,916 Indian inhabitants and municipio Trujillo, then encompassing all of northeastern Honduras from Trujillo to Cape Gracias a Dios, ranked second with 2,514 Indian residents. The only other municipio to record greater than 2,000 Indian inhabitants was that of San Francisco in Olancho, but that figure is quite suspect. The two municipios most associated with the Pech around that time, Catacamas, which then included the territory of municipio Culmí, and San Esteban, recorded Indian populations of 1,839 and 334, respectively. Catacamas ranked fifth overall in the number of Indian inhabitants. Some Pech undoubtedly lived within the vast territory of municipio Trujillo as well, but it is not possible to differentiate them from the population of other indigenous affiliations from the census information alone.

The mean proportion of population that was indigenous for the 203 municipios was 21.44 percent, while the median indigenous percentage was only 2.99 percent. Of course, 25 municipios again registered a 0 percent Indian population and another 25 contained populations greater than 75 percent Indian (Figure 12). Eighteen municipios recorded populations greater than 90 percent Indian. Two municipios, Guanaja in the Bay Islands and Marcovia in Choluteca, reported indigenous populations of 100 percent. The municipio with the third highest percentage Indian population, San Francisco de la
Indian Population of Honduras, 1887

Figure 11. The Indian population of Honduras in 1887.
Figure 12. Indigenous percentage of municipio populations in 1887.
Paz, was one of three Olancho municipios that showed a larger than expected indigenous population component. San Francisco's 99.95 percent, Guata's 94.22 percent, and Jano's 71.24 percent Indian populations are all greater than those found in the two known Pech municipios of the time. The census reported that 56.67 percent of Catacamas' and 18.02 percent of San Esteban's populations were Indian. Manto's 3.05 percent Indian population was the next highest. The focus of missionary activity in the department during the 1800s, from the founding of Pacura and San Esteban to the titling of lands in Culmí and El Carbón, as well as the reports of the researchers Sapper in 1898 and Conzemius around 1920, all indicate that the majority of the Pech population was located in the eastern part of Olancho in what in 1887 were the municipios of Catacamas and San Esteban. These municipios, then, would be expected to have registered the highest proportions of indigenous population, which they did by a considerable margin over all other Olancho municipios except for San Francisco, Guata, and Jano. These three municipios in turn far outstripped Catacamas and San Esteban in percentage Indian population and San Francisco recorded a greater total Indian population than the two known Pech municipios while Guata and Jano both had more Indians that San Esteban, yet Sapper and Conzemius do not even mention these three anomalous municipios in their reports. Guata and Jano, at least, were Pueblos de Indios in the 1801 census but, as was the case for other 1801 Pueblos de Indios, this is no guarantee that they remained Indian-dominated by 1887. San Francisco, listed as Sapota, had registered a non-Indian population in 1801 of 1 Spanish and 75 ladino families and 49 solteros and Fiallos (1991: 311) indicated that in 1829 ladinos and Indians both inhabited the town (see also
Monografía 1935: 66). The evidence for a Hispanic presence in San Francisco from 1801 and 1829 suggests that the 1887 census's report of a 100 percent Indian population in the town is in error. It is very likely that the priests and researchers were attracted to the eastern Olancho Pech area because it was still isolated and the Indians were still relatively "pure," but even in Culmí the Indian percentage of the population was not as high as the percentage registered in any of the six towns of San Francisco. It would seem that the populations of the three anomalous municipios was, at most, composed of largely acculturated Indians that had lost much of their indigenous culture. Based upon the observations of Sapper and Conzemius, many of the supposed Indians of Catacamas and San Esteban living outside of the Pech settlements which they identified must also have been heavily ladinoized.

Although the 1887 census recorded the ladino and indigenous inhabitants of each settlement it did not, unfortunately, specify the native culture of the indigenous inhabitants. In areas that were known to be inhabited by a particular group it seems safe to assume that the Indians enumerated were members of that group. In other areas, such as traditional border zones or transition zones between native groups, however, the ethnic affiliation of the Indians enumerated is more open to question. Likewise, in Olancho, it appears probable that mestizos or Indians that were in reality ladino in culture were sometimes counted as Indians. These problems, in conjunction with the omission of portions of eastern Honduras from the census, dictate that a map of Indian settlements recorded in the census is not sufficient to allow a delimitation of the Pech region in 1887. Such a map does, however, illustrate the status of ladino and Indian
settlement as recorded by the census and provides a point of departure for a more informed delimitation.

Data from three departments then in existence—Olancho, Colón, and Yoro—are pertinent to our consideration of Pech distribution in 1887. Within Yoro the only municipio lying within or near the early Pech region and showing a significant indigenous population in 1887 is that of Olanchito. Of the fourteen settlements enumerated in Olanchito, only 5 recorded any indigenous inhabitants, and only three of those had more than two individuals. El Juncal, located east of the town of Olanchito had 25 Indians who made up 37.31 percent of its total population of 67 persons. Santa Bárbara, located west of Olanchito and northeast of Arenal, recorded a total population of 50 persons, of whom 25, or fifty percent, were Indians. Only the town of Agua Caliente had a majority Indian population within the municipio. Located on the Río La Vega at the western end of the municipio, 171 of Agua Caliente’s 175 inhabitants were classified as Indian.

Although El Juncal lies within Davidson’s early Pech region and Santa Bárbara and Agua Caliente lie near its border with the Tol region, the nature of these Indians is uncertain.

In 1887 the department of Colón was composed of six municipios and only three, La Ceiba, Tocoa, and Trujillo registered significant Indian populations. Because the census does not distinguish between the Indian groups, it is not possible to discern the number of Pech included therein. It is to be expected that many of the Indians recorded in settlements near the coast were Miskito, or Sambo.

In Olancho we can more safely assume that Indians enumerated in the settlements of the municipios should be Pech. No settlements were included from the Sumu area of
southeastern Olancho in municipio Catacamas, and neither were any settlements in northeastern Catacamas and San Esteban listed that would extend into the Miskito region. The problem here is not whether the Indians were Pech but, rather, whether the Indians were Indians. The municipios of Catacamas, San Esteban, San Francisco de la Paz, Jano, and Guata recorded the largest numbers of Indians in the department (Figure 13). Except for the settlement of Ocotal in municipio Manto, the only settlements that registered near fifty percent indigenous population were located in these five municipios.

Within the two known Pech municipios the problem of misidentification of ladinos as Indians may also have occurred, but the enumerations at least identify the major Pech settlements within each municipio as the most Indian, in one sense or another (Figure 14). Especially in the case of Catacamas, however, a large Indian population is recorded that is not evident in the research reports. The town of Catacamas itself recorded the largest number of Indians in the municipio, although its 573 Indians accounted for only 53.30 percent of the total population in comparison to Culmi’s 496 Indians which were 95.57 percent its total. Except for San José’s 3 recorded Indians, every settlement in municipio Catacamas recorded over 80 Indian residents. Six of the nine places enumerated in the municipio had a majority Indian population.

In contrast, only two of municipio San Esteban’s twelve census places recorded a majority indigenous population and each of those, San Pablo’s (now known as Santa María del Carbón) 212 and Santa María Tayaco’s 92 residents, were 100 percent Indian. Conquire’s 17 Indians was the next highest recorded in the municipio. The two missions
Figure 13. Population composition of Olancho municipios in 1887.
Figure 14. Population composition of eastern Olancho settlements in 1887.
founded in the early years of the nineteenth century, San Esteban and Pacura, had only 3 and 2 Indian inhabitants reported, respectively.

The modern municipio of Culmi was, at the time of the 1887 census, still a part of municipio Catacamas and the only settlement reported within its present territory was the aldea of Culmi itself. Its 496 Indian inhabitants were second only to the cabecera of Catacamas' 573 persons classified as indigenous within the municipio, and its 95.6 percent indigenous population was the most Indian of the municipio's nine recorded settlements. The municipio of Culmi was created in June of 1898 (Fiallos 1991: 303; ANH 1898). Although some non-Pech were living in the new municipio, its boundary can serve as the westward extent of their territory at this time. The Sumu inhabited the southeasternmost part of the new municipio and some ladino cattle ranches also were within the municipio.

The Reports of Sapper and Conzemius

In the late nineteenth and early twentieth centuries, two researchers with ethnographic interests visited the Pech core region and provided what is probably the most reliable data concerning the status of the Pech at that time. Because they were specifically interested in, among other topics, the ethnography of Central America, the reports produced by Karl Sapper and Eduard Conzemius from their work in the region should be considered authoritative and the other sources of information here reviewed, such as the census of 1887, must be considered in light of the data provided by these men. Of particular interest at this point are population and settlement data of the area reported by these researchers, and how these data compare to the official census of
1887. Their works provide the primary information from which to measure Pech territorial and cultural change during this century.

Karl Theodor Sapper was born in southern Germany in 1866 and studied geology at the University of Munich, where he earned his doctorate in 1888 (Termer 1966: 154-155). Health concerns encouraged him to travel to the Alta Verapaz region of Guatemala in 1888 where his brother owned several coffee fincas (Termer 1966: 157). The trip was the beginning of twelve years of research on geography, geology, and anthropology throughout Central America and southern Mexico. Sapper left Central America to return to Germany in 1900, but he continued his research travels to various parts of the world for another quarter century. His final trip, from June 30, 1927 to March 2, 1928, took him through South America to Central America for the last time (Termer 1966: 186). Although trained as a geologist, Sapper collected data and wrote on a great variety of topics in the course of his research. West reported that writings on ethnology ranked third behind only vulcanology and climate and meteorology in the number of works produced by Sapper.

Sapper visited the Pech core region in 1898 during the first of two trips to eastern Honduras. Central and eastern Honduras at that time were still “areas that for the most part had not been investigated by trained geologists and geographers” (Termer 1966: 175). From February 28 to April 7, 1898 Sapper’s route took him on a loop from Tegucigalpa through the settlements of Juticalpa, Culmí, Trujillo, Yoro, and back to Tegucigalpa. He had originally planned to proceed from Juticalpa to Iriona on the north coast, but instead turned northward from Culmí toward Trujillo, “since he recognized
that this region [northeast of Culmí to Iriona] was insufficiently interesting for a
geologist" (Termer 1966: 175). His party reached Culmí, then one day’s travel from Río
Tinto, on March 12 (Sapper 1899). Sapper noted that Culmí was founded by Padre
Subirana in 1861 and that he was interested in seeing the town because it was still the
primary site of Paya presence. He took advantage of his time there to record linguistic
and ethnographic data on the Pech, which he reported in his 1899 article, “Die Payas in
Honduras.” An English translation of the article produced by the German Cultural
Center in Tegucigalpa in 1991 was used by this researcher. Sapper also reported visiting
another Pech village along his route to Trujillo, Santa María del Real, which Conzemius
(1928: 10) identified as Santa María o Tayaco, but the only information concerning that
settlement included in the 1899 report was that its inhabitants, like many Pech living
outside of Culmí, could speak only broken Spanish.

Of primary interest here are the indications provided by Sapper of the status of
Pech distribution and acculturation at the time of his visit in 1898 (Figure 15). He
included in his report a list of Pech settlements and their populations that were related to
him by the school teacher and municipal secretary in Culmí, Gregorio Duarte. Duarte’s
status as the community’s teacher indicates that he was a ladino sent to Culmí by the
government. Additionally, Conzemius (1928: 12) noted that the secretaries of El Carbón
and Culmí were always ladinos because of the limited educations of the natives. Only
six Pech locations were reported by Sapper but their distribution, particularly around the
larger settlements, was undoubtedly more widespread than his data indicate on the
surface. Sapper himself noted that the Pech families of Culmí maintained both a house in
Figure 15. Ethnicity of settlements reported by Sapper in 1898.
the town as well as outlying rancherías that were dispersed in the countryside near their subsistence lands. Most of the town houses remained uninhabited during the week and were occupied only on Sundays. Thus the populations reported for the larger settlements should not be considered as permanent residents of the town sites, but as the population of a broader area surrounding the towns. Sapper (1899) reported a count of 385 inhabitants in Culmí and approximate populations of 300 in El Carbón, 50 in Santa María del Real, 30 in Río Alazán, 30 in Guarascá, and 30 in Río Paulaya for a total of 825 Pech (see also Conzemius 1928: 10).

The locations of the first four sites are identifiable from modern maps and from the work of Conzemius, but the remaining two sites are less certain. Conzemius (1928: 10) noted that Guarascá or Warská is the name that the Pech use to refer to the Río Plátano. The name is still used on maps for the upper reaches of the Plátano above the confluence of the Río Chilmeca, and the 1974 and 1988 national censuses included data for a caserío Guarascá near its headwaters. Conzemius also identified two Pech settlements on the Plátano that, if the Pech name is applied to the entire length of that river, could be candidates for the location of Sapper's Guarascá Pech. At the time of Conzemius' research, the only Pech settlement on the Río Plátano was that of Puskira or Pusquira, which he located some 40 to 45 km upriver and 15 km from the coast and in which he counted 41 Pech inhabitants (1928: 19). He reported, however, that the Puskira Pech had moved from a site upriver, known as Chilmeca, some 25 years before. Additionally, Conzemius did not include Guarascá among his list of Culmí caseríos and it therefore seems likely that one of these two downstream sites represents the Guarascá.
Pech that Duarte reported to Sapper. Conzemius' (1928: 19) specification of the
passage of "hace unos 25 años" indicates that the Pech of Chalmeca moved to Puskira
within a few years before or after Sapper's visit. If this group of Pech left Chalmeca for
Puskira 25 years before the time of Conzemius' travels in eastern Honduras around
1920, they would have already moved by the time of Sapper's visit to Culmi in 1898. If
however, Conzemius meant to imply that they had left 25 years prior to the time of his
writing, which was initially published in 1927, then they would have still occupied the
Chalmeca site during Sapper's time. Elsewhere in his monograph Conzemius (1928: 10)
referred to the present population of the Pech as of the year 1921 and, if that date is then
taken as the baseline from which to deduct 25 years, the year of exodus from Chalmeca
would have been around 1896, prior to Sapper's arrival. This migration from Chalmeca
to Puskira foreshadows an eastward shift in the Pech culture region in response to
pressures from the west seen almost 100 years later. Perhaps this is related to reduced
pressure from the Miskito on the east and increasing pressure from the ladinus on the
west.

The other problematic site recorded by Sapper was Río Paulaya. Here, again, the
headwaters of the Paulaya extend into the vicinity of Culmi and the last two population
censuses included Paulaya among the places enumerated. Unlike the case with
Guarascá, however, Conzemius did mention a caserío of Culmi, Pavo, that cannot be
located on the maps of today and which some modern Pech have speculated may have
been a corruption of the Pech name for the Río Paulaya, Paó. Additionally, Pech
informants have reported that, while no Pech live there today, the site of Pucuyo, near
the modern aldea of Paulaya, was formerly inhabited by the Pech. Conzemius (1928:12), like Sapper, however, noted the dual residence pattern that was characteristic of the Pech in Culmí and stated that their "primitivos ranchos" were dispersed from 4 to 30 km from town. His inclusion of Pavo among the caserios of Culmí, all of which lie within the stated 30 km, therefore, implies that its residents also would have maintained a house in the town. If this was the case in 1919, it is also likely that any upper-Paulaya Pech also were part-time residents of Culmí in 1898 and that they would have been included in Sapper's population figures for the town. His separate estimate of about 30 Pech at the Río Paulaya, then would have referred to another Pech settlement farther removed from Culmí. It is likely, therefore, that Duarte's report to Sapper referred to the Pech settlement farther down the Río Paulaya that Conzemius identified as El Payal, known today as Paya, near the confluence of the Ríos Paya and Paulaya. Conzemius (1928:17) counted a total of 31 Pech in El Payal in 1921 and this agrees with the estimate made by Duarte in 1898. It also seems certain that the Pech of Culmí were somewhat familiar with this location, because Sapper (1899) reported that they sometimes obtained stone metates from a ruin on the Río Paulaya near the sites of El Barranco and El Dorado. These can be located just downstream from Paya.

The locations of the six Pech sites reported by Sapper, therefore, can be made to fit very well with the more detailed place listings of Conzemius some twenty years later. They also provide a very good estimation of the extent of the Pech population distribution at the turn of the century. Unfortunately, Sapper did not address the extent of ladino infiltration into this remaining Pech region at the time, but it is clear that, in
Culmü at least, there was already some ladino presence in the Pech core. This is in agreement with both the 1887 census and Conzemius’ later descriptions. Sapper noted that he stayed with one of only a few families of mixed Indian and ladino heritage then residing in Culmü and that an unspecified number of ladinos, in addition to approximately 60 Indians, attended a town meeting after church. Although he passed through both Catacamas and Río Tinto on his way to Culmü, Sapper made no mention of Pech inhabitants there, and he presented the populations of the five locations discussed above as total Pech population then in existence, although he did mention that he later met a Pech woman near Trujillo.

Eduard Conzemius was from Luxembourg and worked as a forestry prospector in eastern Honduras and Nicaragua during the early part of the twentieth century (Incer 1988: 79). He lived and worked in eastern Honduras from 1917 to 1921 (Conzemius 1928: 61). During his travels he also collected ethnographic data on the native groups of the area from which he published several studies on the Pech, Miskito, Sumu, and Rama Indians of the Atlantic watershed of northern lower Central America. Conzemius’ monograph on the Pech stands out as the most complete and the most important single work on Pech ethnography and early twentieth century geography. His extensive travels in the region allowed him to provide not only a detailed report of the Pech settlements at the time; he was also able to note the locations of non-Indian settlements as well as to provide indications of the extent of ladino infiltration into the Pech settlements and the region as a whole (Figure 16). Further, because his explorations took him outside of the Pech region and his interests also focused on the neighboring native peoples inhabiting
Settlements Reported by Conzemius, 1919-1921

Dominant Ethnicity

- Ladino
- Miskito
- Pech
- Sumu

Figure 16. Ethnicity of settlements reported by Conzemius around 1920.
those lands, we can have a great degree of confidence in his reports of the extent of Pech
distribution at the time. Specifically, since Conzemius also produced a separate
monograph on the neighboring Miskito and Sumu Indians, it can be assumed that he did
not commonly mistake one ethnic group for another and that the locations provided for
each, and the boundaries inferred therefrom, were an accurate reflection of the reality of
the time. His wide-ranging travel in the area also implies that there are few blank areas
in his coverage and, therefore, that the status of Pech and ladino settlement along the
eastern frontier of Honduran society, and of Pech distribution in total, presented in his
work is relatively complete.

Conzemius (1928: 10) identified four primary centers of Pech occupation, and he
estimated a total Pech population of only a little over 600 in 1921. He initially reported
the approximate Pech populations of these centers as 250 in Culmí, 300 in El Carbón, 30
in El Payal, and 40 in Puskira, but he later presented slightly more specific figures in his
detailed descriptions of each location. Culmí and El Carbón are already well known, and
the locations of the remaining two settlements are identifiable from Conzemius’
descriptions. El Payal was located “en la orilla del riachuelo Paya, a un km. de distancia
de su desembocadura en el río Paulaya” and Puskira was reported to be on the Río
Plátano some 40 to 45 km upriver from its mouth, but only 15 km in a straight line from
the coast. The El Payal location corresponds to the modern location of the settlement of
Paya, near the confluence of the Ríos Paya and Paulaya and was probably the site of
Sapper’s Río Paulaya Pech. The location of Puskira was almost certainly near that of the
modern Pech area of Las Marías and Báltiltuk, or Ciudad Paya, on the lower Río Plátano
although the described measurements do not correspond exactly to its actual location some 28 km from the coast and 49 km upstream.

Two of the Pech settlements reported by Sapper, Santa María del Real, or Tayaco, and Río Alazán were not included among Conzemius’ list of major Pech sites. Each is mentioned, however, as a caserío of aldea El Carbón, and Conzemius indicated that the Pech of both sites had been displaced to some extent. He noted that three caseríos, Santa María o Tayaco, El Alazán, and Paso Real, which was not mentioned by Sapper, were all previously “habitados exclusivamente por indios payas” but were by his time “ocupados por ladinos” (1928: 16). Additionally, he noted the presence of North American gold miners at El Alazán. Conzemius characterized the caseríos as “consisten generalmente de dos a tres casas” (1928: 16) and, in a footnote, he explained further that the former Pech inhabitants of El Alazán had, by his time, moved to the area of El Carbón and that Santa María o Tayaco had both ladino and Pech inhabitants. The note indicating the presence of both ethnicities in Tayaco seems to contradict the intent of his statement, presented above, that Tayaco was previously a Pech settlement but had become occupied by ladinos. Giving weight to both statements, it can be assumed, therefore, that in Conzemius’ time the Pech inhabitants of Santa María o Tayaco were a small minority of the total population. Thus, it can be seen that the Pech population had been largely displaced from both El Alazán and Santa María Tayaco since Sapper’s time.

Conzemius’ account provides important information regarding the distribution of both Pech and ladino populations within the Pech region. He reported both the main caseríos associated with the major Pech settlements and some important neighboring
ladino settlements. He also provided indications of ladino inhabitants within the Pech settlements and region. By considering these details of his report we can gain the clearest possible view of the status of the Pech region around 1920.

Conzemius (1928: 13) reported that the national census of December 1916 recorded a total population in municipio Culmí of 450 persons, and he noted that 90 of these were classified as either ladinos or Sumu Indians, leaving a total of 360 enumerated Pech Indians. In 1919, Conzemius counted “apenas 300 Payas en Culmí y alrededores” (1928: 13). This figure is greater than the 250 Pech which he reported in his initial summary. In the town of Culmí, Conzemius counted a total of 25 houses, two of which were occupied by ladinos. Like Sapper, however, he noted that the Pech houses in town often remained empty while the owners lived in the dispersed rancherías of two or three houses that comprised the caseríos of the municipio. He reported that the “principales caseríos” of Culmí were “Aguaquire, La Danta, Pueblo Viejo, El Marañon. Vallecito, Pisijire, La Colonia, Pavo, Pedernales, Belén, y Punta Piedra” (1928: 13) and that the municipio also contained two Sumu-occupied caseríos on the lower Rio Wampú, Pautar Busna and El Sumal (1928: 7), and the ladino-controlled site of Agua Blanca, “que consiste de dos ranchos de ganado con pastos de zacate de guineo y pará; los propietarios son de Catacamas” (1928: 13). Conzemius also indicated that there was a ladino presence in the caserío of La Colonia, which he described as “una pequeña hacienda de ganado y dos ranchos de indios payas” (1928: 18).

The settlement sites of municipio Culmí reported by Conzemius can be located on modern topographic maps from the Instituto Geográfico Nacional (IGN) or Aguilar.
Paz's 1954 national map, with the exceptions of Pavo and Belén. Some of the sites, such as Vallecito and Pedernales, have been adjusted slightly from their locations as shown on the maps based upon fieldwork in the area. Pech informants have provided the only clues to the locations of the now unknown sites of Pavo and Belén, and these have been mapped at the suggested locations, although these locations remain uncertain. The only Pech sites recorded by Conzemius that remain dominated by Pech inhabitants today are those of Vallecito and El Marañon, now Pueblo Nuevo Subirana.

In identifying the geographic location of Culmi, Conzemius (1928: 14) mentioned several settlements outside of municipio Culmi to the southwest, the towns of Juticalpa and Catacamas and the aldea of San José de Río Tinto, whose populations he did not describe. His lack of attention to the population composition of these sites is conspicuous given the focus of the monograph and his usual care in identifying locations of Pech habitation. It can be assumed, therefore, that Conzemius considered these sites to be occupied by ladinos. He did, however, discuss the status of caserio Pataste, which is located between San José de Río Tinto and the Catacamas-Culmi border. He reported that this site was settled with Pech Indians by the government in 1791 but that "los habitantes hoy no se distinguen de los otros ladinos y la lengua de sus ascendientes se extinguió hace muchos años" (1928: 14). Clearly, then, Conzemius felt that the inhabitants of Pataste had been completely ladinoized and that the population centers of Río Tinto and the Guayape Valley, which were even farther removed from Culmi, were no more Pech settlements than was Pataste.
A lack of attention to population characteristics, on the one hand, and of even mention of settlement sites on the other, is also seen in the description of the routes connecting Culmi to San Esteban and the lower Río Wampú. He noted that a "camino muletero" crossed the Agalta mountains to the northwest of Culmi and passed through the settlement of San Agustín on its way to San Esteban (1928: 14). No mention is made of Pech inhabitants at either of these sites, and San Esteban is later included among the ladino settlements near El Carbón (1928: 16). To the southeast of Culmi, Conzemius stated that the four day journey to the Sumu villages near the mouth of the Wampú “conduce por una región que sólo fieras habitan” (1928: 14). The route traveled overland to the confluence of the Río Lagarto and the Río Wampú and thence down the Wampú to its confluence with the Río Patuca (1928: 15). Along this entire route, according to Conzemius, there were no settlements of any type until one reached the Sumu settlements.

Unlike the municipio of Culmi, municipio San Esteban had a significant ladino population in addition to its Pech inhabitants in Conzemius’ time. He did not, therefore, list all, nor probably even the majority of, settlements in the municipio. He did, however, mention the major ladino settlements in the area as well as the caseríos associated with the main Pech settlement of the municipio, El Carbón. Conzemius’ discussion of the various settlements in San Esteban, however, suffers in places from a confusing use of the term municipio. He appears to refer to El Carbón and its associated caseríos as a municipio when, in fact, aldea would seem to be a more appropriate designation. This apparently stems from a conception of El Carbón, which was listed as
an aldea of San Esteban in the 1887 census, and still so in the 1988 census, as parallel to that of Culmí, which achieved the status of municipio in 1898. Because Conzemius was correctly able to consider Culmí an independent, Pech controlled, and predominantly Pech inhabited, municipio in 1920, he apparently also considered the domain of El Carbón to be a somewhat self-contained, or Pech dominated, unit. As an example, he reported population data for the municipio that seem to apply only to the inhabitants of El Carbón and its caseríos. He was clearly aware of the official status of the Pech settlements of this area, however, because he also noted that the “municipio” of El Carbón had not achieved a level of independence equal to that of Culmí illustrated by the fact that the elected officials of El Carbón “están sujetos a la municipalidad de San Esteban” (1928: 16). Conzemius’ characterization of aldea El Carbón as a municipio highlights his understanding of the settlements of Culmí and Carbón as the centers of two discernable zones of distinctively Pech culture and occupation but a careful reading is necessary to avoid attributing data intended to refer only to the Pech region of municipio San Esteban to the entire municipio.

The Pech settlement of El Carbón is referred to today by the full name of Santa Maria del Carbón. Conzemius reported, however, that in 1919 its full name was “San Pablo del Carbón” (1928: 15), and it was as San Pablo that it appeared in the 1887 census. Conzemius stated that the ladinos of the area referred to an offshoot or a spur of the Sierra de Agalta which included Cerro del Diablo as San Pablo (1928: 16). The 1991 Instituto Nacional Agrario survey of the El Carbón lands, however, labeled the ridgeline that descends eastward from Cerro Corocito toward Río Agua Amarilla, which
lies on the opposite side of that river from Cerro del Diablo, as the Montaña San Pablo. It can be seen, then, that the place name San Pablo is still associated with the area even though the Saintly designation of the settlement itself has apparently changed over time.

Conzemius reported that the population of the municipio, apparently referring to the aldea of El Carbón was “de 375 a 390 de los cuales no más de 300 son Payas” (1928: 16). The town itself had “unas 35 casas” (1928: 15) but, as was the case in Culmí, most of the population lived in scattered caseríos of two or three houses (1928: 16). The principal caseríos of El Carbón were reported as “Casa Quemada, La Bolsa, Jocomico, El Portillo, El Corozo, El Corozalito, San Pablo, El Cumbo, Santa María o Tayaco, Paso Real y El Alazán” (1928: 16). Tayaco and El Alazán do not fall within the present boundaries of municipio San Esteban, but it seems that in Conzemius’ time El Carbón was the aldea with which they were most closely associated. This undoubtedly was due to their former Pech occupants and their historic cultural connection to the major Pech settlement. The sites of most of these caseríos are relatively easy to locate from modern Instituto Geográfico Nacional maps, the Aguilar Paz map, and census bureau maps, with the exceptions of El Corozo and El Corozalito.

The caseríos of Santa María Tayaco, Paso Real and El Alazán were all noted to be occupied by ladinos in 1919, although previously their populations had been entirely Pech (1928: 16). Each of these is mentioned elsewhere in Conzemius’ report and the separate references add to our understanding of their status in 1919. El Alazán was a gold mining site on the Río Alazán, a tributary of the Río Sico north of El Carbón, which was occupied by ladinos and North Americans (1928: 9, 16). Its former Pech
inhabitants had moved to the vicinity of El Carbón by Conzemius’ time (1928: 10). Paso Real was included among the important ladino settlements neighboring the Pech region of municipio San Esteban (1928: 16). Santa María Tayaco was reported to have both ladino and Pech inhabitants (1928: 10). It appears, therefore, that these three were the only caseríos of El Carbón with ladino populations and that, of the three, El Alazán and Paso Real were exclusively ladino while a small Pech presence remained in Tayaco. The tenuous nature of the Pech in Tayaco at this time is evident in the history and geography of the place. Sapper had reported a Pech population there of about 50 persons. Conzemius seemed to emphasize a ladino dominance there. It is the westernmost of the El Carbón caseríos reported by Conzemius and it lies in close proximity to La Soledad, one of the ladino aldeas to which he referred. It seems apparent, then, that Tayaco was in the last stages of becoming a purely ladino settlement in 1919. Noticeably absent from Conzemius’ settlement list, as it was from Sapper’s less detailed list, is any Pech site in the vicinity of the Quebrada de las Piñas parcel that was titled to the Pech under the efforts of Subirana. The sites nearest to this parcel mentioned by Conzemius were Conquire, located downstream on the Río Conquire, and which was identified as a ladino aldea, and Jocomico, northeast of the confluence of Quebrada de las Piñas and Río Conquire along the road to El Carbón, and which Conzemius included among the Pech caseríos of El Carbón.

As he did in the case of Culmi, Conzemius (1928: 16) situated Carbón geographically in relation to several surrounding ladino settlements in municipio San Esteban. These ladino settlements included San Esteban itself and aldea Conquire to the
southwest, *caserio* Paso Real to the northwest, and *aldea* La Soledad to the west. Conzemius’ focus on the Pech is obvious from his omission of any *caserios* associated with the *ladino* towns and *aldeas* mentioned and this no doubt contributes to a perception of less *ladino* territorial occupation bordering the Pech zone than was probably the case. While it is possible that the *ladino* settlements may have had fewer associated *caserios* than did El Carbón, it is very likely that there were some smaller *ladino* settlements lying between those settlements mentioned by Conzemius. And it is even more likely that land use by *ladinos*, if not the location of actual settlement sites, was more widespread than we are led to believe on the basis of Conzemius’ report alone. That he failed to present all of the *ladino* settlements within the *municipio*, while presenting a more comprehensive listing for the Pech portion of it, is seen in the comparison of his work with the 1887 census. His list does not include all of the settlements recorded for *municipio* San Esteban in the 1887 census and the inclusion on the map of the additional sites enumerated therein presents an even starker delimitation of the Pech-*ladino* frontier in *municipio* San Esteban.

In addition to the settlements of Culmí and El Carbón and their associated *caseríos*, which comprise the core area of the twentieth century Pech region in western *municipio* Culmí and northeastern *municipio* San Esteban, Conzemius also reported the existence of two important outlying sites of Pech occupation lying to the northeast of the core area along major rivers whose headwaters extend into the core. Davidson’s map of archaeological sites in this region presented at the Cultural Map of Spanish America symposium shows that these rivers, the Paulaya and the Plátano, as well as middle Rio
Sico which also drains the Pech core area, were more widely inhabited by natives in the past (Davidson 1990). In Conzemius' time, however, only two sites of Pech occupation remained. There were, of course, ladino and Miskito settlements downstream from the Pech sites, but, unlike today, it appears that there was no appreciable non-Pech occupation of the territory between the outlying sites and the Pech core. At 1920, then, El Payal and Puskira marked the northeastern limits of the Pech region, much of which, beyond the core, was uninhabited, although probably not completely unutilized. The modern site of Puskira, near Las Mariás, in contrast would have to be considered an exclave of any delimitable modern Pech region, separated as it is by, still thinly settled, zones of ladino population near Culmí.

Conzemius (1928: 17) reported that six houses, one occupied by ladinos and five by Pech, made up the settlement of El Payal in 1921 and he counted 30 total Pech inhabitants at the site. He noted that the Pech of El Payal traveled to the coastal settlements of Palacio and Iriona to sell their produce of pigs, chickens, and eggs, but made no mention of Pech inhabitants in those locations. He also noted the presence of two ladino caseríos, El Barranco and La Cirila, and an abandoned gold mining site at El Dorado between El Payal and Iriona along the overgrown route of the colonial-era Olancho-to-Iriona camino real. The Pech of El Payal then maintained contact with their relatives in Culmí, with whom they exchanged tunu cloth for coffee, but did not maintain relations with the Pech of El Carbón nor, after their move from Chalmeca to Puskira, the Pech of the Río Plátano. Along the three day journey from El Payal to Culmí, Conzemius reported that no settlements were encountered until one reached Culmí's
casero of La Colonia (1928: 18). Along the route, however, at the confluence of the Rios Guayabo and Paulaya, was located the ruins of a fort, which the Pech told Conzemius had been constructed by the English when they controlled Black River.

The Pech of Puskira, after their move from Chalmeca some 25 years prior, no longer maintained regular contact with the other Pech settlements to the interior and their close contact, and intermarriage, with the neighboring Miskito led Conzemius (1928: 19) to believe that they were well on their way toward complete assimilation into Miskito culture. A trail had been maintained between the site of Chalmeca and the Rio Paulaya Pech, a journey of two to three days, but the greater distance to Puskira served to isolate its inhabitants from their relatives. Conzemius counted eight houses, which were occupied by 41 Pech, 2 ladinos, and 2 Miskitos, in Puskira and he stated that the site was “el único caserio poblado por Payas sobre el río Plátano” (1928: 19). Other Pech-blooded individuals apparently inhabited the Atlantic littoral, however, as Conzemius noted that the offspring of Pech-Miskito marriages “se crian generalmente fuera de Puskira, y prefieren considerarse como Mosquitos y hasta se avergüenzan de su origen paya” (1928: 19).

Conzemius specified that Puskira was the only Pech settlement on the Rio Plátano and made no mention of any other Pech settlements in the area. That Puskira was the northeasternmost Pech site, and the only Pech site in that portion of the Atlantic lowlands, at the time is strongly indicated by his failure to note any other Pech settlements, his recognition of the Puskira Pech' isolation from the remainder of Pech nation, and his identification of the inhabitants of the neighboring coastal areas as

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Miskito. Although he did not supply specific place names for nearby sites of Miskito populations, Conzemius stated that the Miskito had established themselves "en la desembocadura del río Plátano y en toda la región contigua" (1928: 19) and that they inhabited the Laguna de Ibans. Conzemius did not include detailed listings of Miskito and Sumu settlements in his 1932 monograph as he did for the Pech in 1928. Rather, he simply described the region of Honduras occupied by an estimated 3,000 to 4,000 Miskito at the time which extended along the Atlantic coast from the Río Tinto to the Río Coco and was comprised of the "seashore and lagoons as well as the lower Río Patuca" (1932: 13).

The works of Sapper and Conzemius provide a valuable perspective on the status of Pech population and settlement around the turn of the twentieth century. Although Conzemius supplied more detail, their reports from the Pech region are mutually reinforcing in defining both the territory inhabited predominantly by the Pech as well as the non-Pech territory of eastern Honduras as inferred from the specific non-Pech settlements reported by Conzemius and the omission by both writers of any Pech settlements outside of the discernible Pech region. Pech sites that had experienced changes in their population composition during the intervening twenty-one years, such as Santa María Tayaco and Río Alazán, were still identifiable by Conzemius as places that had recently been dominated by the Pech. The failure of both men to identify concentrations of Pech Indians in the municipios of Catacamas, San Francisco de la Paz, Jano, Guata, or Manto calls into question the accuracy of the designation of significant numbers of residents in those municipios as Indian by the 1887 census. Because these
researchers obtained their information from within an overtly Pech region, their informants should have been aware of other large concentrations of Pech and none were reported to the west of the modern municipios of Culmí and San Esteban. A recent analogy is seen in the 1988 census’ record of Pech inhabitants in the department of Comayagua, a group of which both Pech informants and the local municipio authorities were unaware and which, in reality, did not exist.

Conzemius’ writings further aid in the interpretation of the 1887 census by his identification of the few Pech sites within what, at the time of the census, was the department of Colón and his determination that the eastern littoral was then dominated by the Miskito. Although he noted that the ladinos of the Mosquito Coast were increasing since 1860, they were most numerous in his time within Nicaragua (1932: 7). His works lend support, then, to the impression given by the census that the settlements of far eastern Colón were dominated by Indians and that these Indians were Miskito and not Pech. That is, in as much as the 1887 census may have been correct in its enumeration and classification of the inhabitants of La Mosquitia as Indian, except for the Pech sites specifically reported by Conzemius (none of which were reported in the census listing), those Indians were predominantly of Miskito culture.
CHAPTER 6

The Honduran Frontier in the 1900s – National Growth and Development overtakes the Pech Region

Introduction

The twentieth century has been a period of consolidation and intensification of Honduran activity in Olancho, with a slight advance of the limits of effective national control. This advance is important, however, because the frontier has overtaken the core of the Pech region. During the first half of the twentieth century most activity still remained behind the frontier zone of missionary activity in eastern Olancho. The middle and latter decades of the century, however, saw the advance of the Honduran society, infrastructure, and economic system into the Pech core. The advance of the frontier has led to many changes for the Pech.

The processes of growth and expansion of national systems in eastern Olancho during this century are the structural roots of recent cultural and geographic changes experienced by the Pech. These processes, or indicators of them, must be examined, then, to understand how the Pech have arrived at their current condition. Growth in the demographic, economic, and infrastructural systems of Olancho can be discerned in historical reports and statistics as well as, in some instances, in the present landscape.
Such growth illustrates the increasing incorporation of Olancho into the national sphere. From the geographic perspective, however, it is not simply a question of growth, but where growth has occurred. It is the eastward expansion of these sectors of the national sphere that has served to more firmly incorporate the earliest settled parts of the department and, at the same time, to extend the national reach into the Pech core area. We will necessarily be concerned here, then, not simply with the development of Honduras as a whole, but more so with the growth of the demographic, economic, and infrastructural systems specifically in Olancho as well as in the Pech municipios.

Growth in the demographic, economic, and infrastructural systems in Olancho provide fundamentally geographical illustrations of the advance of national society into the Pech core. As in any study of development over time, the full magnitude of a process cannot be evident to an individual researcher until he or she has spent many years in the area. Historical accounts, both written and oral, and archived data are necessary, therefore, to complete the picture of past conditions with which to compare the present situation so that developmental trends can be established. Historical reports and statistics illustrate the status of settlement, population levels, economic activity, and infrastructural development for previous times. Field work provides the opportunity to gather these data from archives and oral histories.

Field work also allows the researcher to identify recently important processes of change in the study region via discussions with informants and landscape evidence. Such was the case in this study, where informants' reports highlighted the recent growth in population and settlement, road construction, and primary economic activity in the Pech
municipios and where observation confirmed the importance of ongoing road construction and of primary economic products such as cattle, coffee, and timber.

Historic Municipio Boundary Maps of Honduras

Much of the data presented in the following sections was acquired from the archives of Honduran government agencies charged with the collection of statistics on the population and economy of the country. Usually, these agencies compile the data according to the jurisdictional units of the country’s political hierarchy corresponding to the country, department, and municipal levels. To utilize these data for analysis and display most effectively and efficiently, that is, to facilitate mapping of the data at their most detailed level, a series of computerized maps of the departments and municipios of the country was created. Once created, the maps allowed the display of the data according to their appropriate level of resolution within the historical boundary framework current at the time of their collection for analysis and illustration.

The boundaries of the third order political subdivisions, the municipios, were digitized from the Instituto Geográfico Nacional de Honduras’ variable scale series of Honduras Departamento maps on an Intergraph computer workstation running MicroStation software in the LSU Department of Geography and Anthropology’s Computer Mapping Sciences Laboratory. Additional base cartographic data that appear in this dissertation were captured from the IGN’s 1:50,000 and 1:250,000 scale series of topographic maps, the Defense Mapping Agency’s 1:250,000 scale series of aeronautical charts, and the Intergraph corporation’s distributed version of the 1:1,000,000 Digital Chart of the World in both the Computer Mapping Sciences Laboratory and the LSU
CADGIS Lab. Copies of the digital base map data were also translated from MicroStation format for use with desktop mapping programs such as MapInfo and Atlas GIS.

The series of Departamento maps provided the municipio boundaries within each department as they existed in the late 1980s and which were suitable for use with municipio-level data from the 1988 census of population and housing. All 290 municipios in existence at the time of the 1988 census were not present at the times of previous data collection efforts, however. Because new municipios have been created throughout the twentieth century via the subdivision of previously existing municipios, it was necessary to recreate the historical municipio and departamento boundaries to represent the situation at the times of earlier censuses. The extant municipios at the time of each census, the municipios created during each intercensal period, and the parent municipio of each new municipio were identified and the new municipios were combined with their parent municipio for each intercensal period to create a series of historical boundary maps suitable for use with each census data set. Recently created municipios can be added to reflect the situation at the time of the 1993 and later censuses using the official published descriptions of the boundaries. In several instances on the older maps the historical situation has not been determined either as to the appropriate parent municipio or the accurate boundary of a now disappeared municipio and a schematic representation of the municipio was created for display purposes. The constituent municipios for each department can be combined for each census year to create departamento-level maps. The entire process produced a series of 15 digital

In general, maps in this dissertation displaying data for a single census simply use the data set and boundary file appropriate to that census year. Comparative maps that illustrate changes from one census year to another on a single map, however, are necessarily based upon the political units extant during the earliest census year of the time period under consideration. In these cases, the statistical data for municipios created during the period are combined with that of their parent municipios to achieve an aggregate value for the area covered by the combined municipios, the ancestral municipio, to allow a geographically consistent framework for comparison over time.

Demographic Expansion—Population, Migration, and Settlement

Of the processes of national expansion into the Pech core to be examined, perhaps that of demographic expansion is the most illustrative of the magnitude of recent changes to the region when the data are viewed at the municipio level. Simply put, the Pech are now a relatively small minority within the two core municipios where, as late as 1950, they were a substantial minority in municipio San Esteban and, perhaps even as late as 1961, a majority in municipio Culmi. Although the Spanish arrived early in the Pech region, the most dramatic increases in ladino population have occurred in recent decades (Figure 17). Statistics of demographic change over the last century illustrate well the magnitude of change faced by the Pech as a minority culture group within Honduran society. They do not in and of themselves tell the whole story, however, and therefore a more detailed examination of the processes of Honduran economic
Figure 17. Population growth in the Pech core from 1887 to 1988.
expansion, such as infrastructural improvements that facilitated expansion and economic activities that both encouraged and resulted from expansion, will be found in following sections. As will be seen later, the numerical subordination of the Pech to ladinos within their historic core region is directly correlated with the extension of roads into the core area and with a reduction in access to lands formerly available for Pech exploitation as the growing ladino population claimed and utilized the once-Pech lands for their own purposes. First, however, we will examine the evidence concerning the basic process of Honduran population expansion, both numerically and geographically, since the last decades of the preceding century.

Honduran Data Caveat

Before beginning this and the following sections, mention should be made of the sometimes dubious quality of the data sets upon which we are forced to rely to acquire an understanding of the country of Honduras as a whole and of specific regions within it. Inconsistencies between, and possible inaccuracies within, officially collected data in Honduras plague any research that depends upon that data and heightens the need for the researcher to corroborate the findings indicated therein. Unfortunately, even though questions can sometimes be raised concerning the validity of some data, it would not be possible to produce an informative account of the Pech and their recent history without reference to them. It is not possible for an individual to reproduce current data nor to recollect historical data which are available in government repositories. Official censuses and other data sets must be consulted, therefore, to provide data unavailable elsewhere that illustrate the past and present human geography of the country. To the extent
feasible, however, the attempt will be made to consider evidence from field work and historical accounts that either supports or contradicts official accounts to serve as a check against errors in the official data. Much of this dissertation is concerned with comparing the evidence from a variety of sources, such as non-governmental reports, local informants, and the landscape itself, with official data and with evaluating the internal consistency of the official data to increase the likelihood of an accurate end product—an accurate history and description of the Pech and their region within the context of modern Honduras.

Honduras’ Population History

Evidence for the statistical and geographical expansion of the Honduran demographic system in the Pech region is seen in an examination of the population histories of the country and its various political subdivisions. Recent demographic changes within the department and municipios containing the Pech region are our ultimate focus, but, while the magnitude of recent change in the immediate environs of the Pech speaks for itself to a certain extent, it is impossible to understand the full meaning of recent changes there without reference to the larger contexts of the national and regional population histories. To appreciate more fully the role of demographic expansion upon change in the Pech region, we need to concern ourselves not only with measures of the absolute magnitude of population change within the Pech core municipios over time but also with measures of the relative population change between various regions that show how the Pech region compares to other parts of the country. Relative change considerations involve, then, both the variable amount and rate of
change within a *municipio* at different times and the amount and rate of change of the Pech *municipios* as compared to other *municipios*, the department, or the country. Each of these measures, considerations, or comparisons sheds light on the situation and combine to provide a more complete picture of the population history of the Pech region.

The 1988 census of population and housing registered a total population for Honduras of 4,443,721 persons spread over 112,088 square kilometers for a population density of 39.645 persons per square kilometer (DGEC 1991:1). Its 1995 population has been estimated at 5.5 million, giving it a rank of third behind Guatemala and El Salvador among the seven Central American states (Population Reference Bureau 1995).

Honduras shares a population history and demographic characteristics that are common among the countries of the developing world. As in many other countries of the third world, a declining death rate combined with a continued high birth rate to produce a demographic transition which led to rapid population growth after the middle of this century. National birth and death rate statistics taken from a series of Honduran government publications show that the country’s annual birth rate per thousand inhabitants actually climbed from the low 30s to the low 40s between 1926 and 1949 and remained at that level as late as 1986 while its annual death rate per thousand fluctuated between 18.5 and 13.3 from 1926 to 1940 and thereafter began a decline that had reached as low as 3.2 in 1987 (DGEC 1954a; DGEC 1985; DGEC 1992a: 5; DGEC 1992b). The government’s calculation of the annual rate of total increase between 1965 and 1987 varied widely over the 23 year span but generally showed the country’s growth
to be in the mid- to upper-30s per thousand in the later 1960s, in the lower- to mid-40s throughout the 1970s, and, after a sharp rise to 55.8 per thousand in 1981, again in the lower-30s and upper-20s through 1987 (DGEC 1992a: 5). While the government's detailed presentation of these demographic statistics, which are complete with total population, live births, and deaths recorded for each year, inspires confidence in the calculated rates of total increase, births, and deaths, caution is raised when one notices that the total national population reported for 1987 is over 212,000 persons greater than the total population recorded the following year in the census of 1988. Other sources, however, seem to support the general situation described by the government statistics for recent years.

The Population Reference Bureau's 1995 compilation of world demographic statistics estimated Honduras' current birth and death rates to be 34 and 6 per thousand, respectively (Population Reference Bureau 1995). The same source also calculated the country's annual rate of natural increase to be 2.8 percent, which was down slightly from its 1990 estimate of 3.1 percent (Population Reference Bureau 1990). Thomas and Stephens reported an estimated annual RNI of 3.5 percent for Honduras in the early 1980s (1983: 77-78) and Davidson recently reported an estimate of "about 3 percent" annual natural increase between 1950 and 1961 (1994: 324). Citing data from both the Honduran census bureau and the World Bank, Stonich stated that "the rate of population growth in Honduras has been among the highest in the world, averaging 3.1 percent per year between 1950 and 1974 and rising to 3.4 percent from 1974 to 1985" (1989: 276). The various sources show substantial agreement, then, on the rate of growth in the
country as calculated, apparently, from the national birth and death rates during the latter half of this century.

According to data collected by the Dirección General de Estadística y Censos (DGEC 1981: 1; DGEC 1991: 1), the country's population grew from 2,656,948 at the time of the 1974 census to 4,443,721 at the time of the 1988 census (Table 1). In terms of the measures of population growth determined from the initial and final populations of the intercensal period, then, this means that the 1974 population grew some 67.249 percent, the intercensal percent change, and the finite rate of total increase was 1.67249 during the census interval. The average annual rate of growth during the period was 0.03742, or 3.742 percent, which is slightly higher than usually reported for the rate of natural increase. This average annual growth rate would, of course, include the balance of immigration and emigration and assumes that the census counts were conducted at the same time during the respective census years. The net migration during the intercensal period is unknown and the total time between the two censuses was slightly more than an even 14 years, as the 1974 census was conducted on March 6 while the 1988 census was conducted on May 29 (DGEC 1981: 201; DGEC 1991: iv).

The population history of the country over the last century is illustrated by the graph of total population at the time of various censuses conducted since 1887 until the most recent census of population in 1988 overlain with the average annual growth rate each prior intercensal period (Figure 18). During this span the enumerated population of the country increased from 331,917 to 4,443,721 inhabitants (DGEC 1981: 31; DGEC 1991: 1). The slope of the total population line shows that the population began
Table 1. Honduras Population History, 1887-1988

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Absolute Change</th>
<th>Percent Change</th>
<th>Average Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>4443721</td>
<td>1786773</td>
<td>67.249077</td>
<td>0.0374198</td>
</tr>
<tr>
<td>1974</td>
<td>2656948</td>
<td>772183</td>
<td>40.969723</td>
<td>0.0267654</td>
</tr>
<tr>
<td>1961</td>
<td>1884765</td>
<td>516160</td>
<td>37.714315</td>
<td>0.0295192</td>
</tr>
<tr>
<td>1950</td>
<td>1368605</td>
<td>168063</td>
<td>13.998927</td>
<td>0.0265501</td>
</tr>
<tr>
<td>1945</td>
<td>1200542</td>
<td>92683</td>
<td>8.3659563</td>
<td>0.0161986</td>
</tr>
<tr>
<td>1940</td>
<td>1107859</td>
<td>145859</td>
<td>15.162058</td>
<td>0.0286364</td>
</tr>
<tr>
<td>1935</td>
<td>962000</td>
<td>107816</td>
<td>12.622105</td>
<td>0.0240584</td>
</tr>
<tr>
<td>1930</td>
<td>854184</td>
<td>153373</td>
<td>21.885073</td>
<td>0.0507215</td>
</tr>
<tr>
<td>1926</td>
<td>700811</td>
<td>94814</td>
<td>15.645952</td>
<td>0.0146425</td>
</tr>
<tr>
<td>1916</td>
<td>605997</td>
<td>63742</td>
<td>11.754986</td>
<td>0.0186957</td>
</tr>
<tr>
<td>1910</td>
<td>542255</td>
<td>44249</td>
<td>8.8852343</td>
<td>0.0171706</td>
</tr>
<tr>
<td>1905</td>
<td>498006</td>
<td>-45735</td>
<td>-8.411174</td>
<td>-0.021726</td>
</tr>
<tr>
<td>1901</td>
<td>543741</td>
<td>211824</td>
<td>63.818364</td>
<td>0.0358852</td>
</tr>
<tr>
<td>1887</td>
<td>331917</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To increase noticeably after the 1926 census with the most rapid increases in total population evident after mid-century. The average annual growth rate line shows some variability but, except for the period between 1901 and 1905, is consistently positive at near or above two percent annual growth and generally trends upward from the early to the latter decades of the century, indicating increasing rates of increase that accentuate the rise in total population growth.

Such rapid population growth has, of course, wrought many changes upon the human geography of the country. Demographic and economic patterns have evolved...
Figure 18. Honduras population growth from 1887 to 1988.
rapidly as the population both increased and redistributed itself within the national borders. Of particular concern to this study, of course, is the impact which the recent increase of population, and particularly the ladino population, in eastern Honduras has had upon the Pech and their historic culture region.

The recent history of rapid population growth in Honduras identifies a national scale phenomenon that has led to increasing pressures on the Pech and their way of life. Simple recognition of national population growth does not tell us about its role in effecting change in the Pech region, however. A geographic perspective on demographic changes, one that distinguishes regional variations in the demographic processes, is important in understanding how the increase in population has come to impact so heavily on the Pech. Geography matters because the Honduran population was never spread evenly over the country and, from the areally differentiated initial situation, demographic change has not occurred equally in every place. Rather than simply viewing the phenomenon at the national scale, then, we shall utilize municipio level population statistics available from the censuses to provide a geographically more detailed view. It should be noted, however, that municipio level data for Honduras, while certainly providing greater geographical discrimination than national or department level data, can be misleading because of the relatively large size of the municipios in the eastern part of the country. Their large size relative to the size of the municipios of western Honduras creates problems in the comparison of absolute data values, or count data, across all municipios because the areal extensions to which the data apply differ dramatically. For example, the same data value, such as the number of inhabitants or head of cattle
produced, reported for both a large eastern municipio and a small western municipio would represent a more intense relative value within the smaller municipio. The large size of the eastern municipios also tends to mask regional differences within the municipios themselves. Population and economic activity is not distributed equally within any municipio but the larger average size of the eastern municipios does not allow as fine of a resolution of geographic patterns when using data collected at the municipio level as is possible in the western half of the country. Indeed, large areas of eastern Olancho and Colón departments as well as interior Gracias a Dios department remain without permanent settlements and intense land utilization today but municipio level data do not allow us to distinguish between zones of more and less intensive settlement and land use within a single municipio. While municipio level data sets provide the greatest possible resolution of geographic patterns across the entire country, the limitations to their usefulness inherent in the geographical configuration of the political subdivisions should be kept in mind. In later sections, when possible and pertinent, more detailed geographic information, such as settlement locations, will be used to provide greater resolution of the topic under consideration.

The department of Olancho, which contains the twentieth century core of the Pech region in its northeastern quadrant, has experienced a population history similar to that of the country as a whole albeit at a smaller absolute magnitude (Figure 19). Its total population increased from 31,132 to 283,852 between 1887 and 1988 (DGEC 1981: 31; DGEC 1991: 1) and its total population can be seen beginning to rise slightly after 1926 and more rapidly after 1945 on the total population graph. The department of
Figure 19. Olancho population growth from 1887 to 1988.
Gracias a Dios was not created until 1957, but its territory was previously part of the department of Colón, and not of Olancho, so its creation has no affect the Olancho population history graph. The onset of rapid population growth in the department mirrors that of the nation as a whole, which also saw its total population graph line begin to rise after 1926 and more noticeably after 1945. Olancho might be expected to show a lag in the onset of rapid growth compared to other parts of the country, given its history of relative isolation. Such a lag is not obvious for the department as a whole, however, but evidence for a delayed onset of rapid growth can be seen in the population history graphs of its more isolated municipios.

No new municipios were created in Olancho between the census years of 1926 and 1988 so that time period provides a consistent geographic framework within which to compare the population histories of the 22 municipios then extant. Two graphs illustrate the population histories of the Olancho municipios during this period. The first displays all data points for all municipios (Figure 20). The second excludes the largest data points of the two largest municipios to provide a more detailed view of the 20 municipios with smaller population sizes (Figure 21). A slight increase in population can be seen in most Olancho municipios between the censuses of 1926 and 1930 with municipios Juticalpa, Manto, Yocón, Gualaco, and San Francisco de la Paz showing the greatest total increases during the period. Only two municipios, Catacamas and Culmi registered a loss of population between 1926 and 1930. Between 1926 and 1950, although there were significant fluctuations in the populations of individual municipios, the general slope of Olancho’s individual municipio populations’ graph lines was one of
Figure 20. Olancho municipios population growth from 1920 to 1988.
Figure 21. Detail of Olancho municipios population growth from 1920 to 1988.
gradual increase over the quarter century. All Olancho municipios registered some increase in total population during the time span with the cabecera municipio of Juticalpa’s absolute increase of 5,821 inhabitants far exceeding that of the next largest total increase, municipio Manto’s 2,547 persons. Compared to the other Olancho municipios during the same time, Juticalpa’s population increase of 67.32% between 1926 and 1950, from 8,647 to 14,468 inhabitants, was relatively large but its average absolute increase, as indicated by the overall slope of its total population line, was low compared both to itself and to other Olancho municipios in later decades.

After 1950, the municipios containing the department’s two largest towns, Juticalpa and Catacamas, were the first to begin showing very large intercensal absolute increases in population and very high average annual growth rates. Other municipios, particularly Gualaco, San Francisco de la Paz, and Guata, also showed significant increases in the slope of their total population lines but these were neither as great nor as sustained as the rise seen in the two largest municipio populations. Indeed, between the censuses of 1961 and 1974, the slope of each of these three less-rapidly-growing municipios, although still rising, can be seen to decrease somewhat while those of Juticalpa and Catacamas continue upward at about the same slope as before. That Juticalpa and Catacamas dominated the department’s absolute increase statistics and ranked among the top of its rate of increase statistics after 1950 through the 1988 census is seen not only in the graph of municipio populations but also in the table of municipio population histories comparing Juticalpa and Catacamas to all other Olancho municipios combined (Table 2). Since 1950, Juticalpa and Catacamas together have accounted for
no less than forty-nine percent of the department's absolute increase over any intercensal period and during the first two intercensal periods of the second half of the century the two municipios registered a combined absolute increase that was greater than the total increase in all of the other municipios of the department. Their combined average annual growth rate exceeded that of the other municipios in each of the three intercensal periods.

Table 2. Olancho Municipios Population History, 1930-1988

<table>
<thead>
<tr>
<th>Year</th>
<th>Juticalpa and Catacamas</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Population</td>
<td>Absolute Change</td>
</tr>
<tr>
<td>1988</td>
<td>127,598</td>
<td>65,226</td>
</tr>
<tr>
<td>1974</td>
<td>62,372</td>
<td>21,407</td>
</tr>
<tr>
<td>1961</td>
<td>40,965</td>
<td>19,474</td>
</tr>
<tr>
<td>1950</td>
<td>21,491</td>
<td>963</td>
</tr>
<tr>
<td>1945</td>
<td>20,528</td>
<td>416</td>
</tr>
<tr>
<td>1940</td>
<td>20,112</td>
<td>3,812</td>
</tr>
<tr>
<td>1935</td>
<td>16,300</td>
<td>1,292</td>
</tr>
<tr>
<td>1930</td>
<td>15,008</td>
<td>681</td>
</tr>
</tbody>
</table>

Among the remainder of the Olancho municipios the overall pattern after 1950 was one of continued population increase but at annual rates below those of Juticalpa and Catacamas over the same period and below the seemingly anomalous high combined rate of all other Olancho municipios during the 1945-1950 intercensal period. While the absolute increases and growth rates fluctuated for individual municipios over the three
post-1950 intercensal periods, with seven municipios recording negative growth between 1961 and 1950 and one municipio recording negative growth between 1961 and 1974. The combined absolute change and average annual growth rate of the twenty smaller municipios was positive over all three periods and increased significantly over their previous levels during the last two intercensal periods. The most dramatic period of change for these municipios was obviously during the latest intercensal period when none registered a negative growth and they combined for a 248.4% intercensal percent change and an average annual growth rate of 0.041. The takeoff after 1974 is clearly seen in the line slopes on the total population graph. The change in slope that can be seen in most of the Olancho municipios after 1974 suggests a lag in the onset of rapid population growth over most of the department compared to the country as a whole and to the two larger municipios in the department. Such a lag is confirmed by the comparison of the average annual growth rates of the combined municipios with those of each of the two larger Olancho municipios and the country as a whole. The combined municipios registered average annual growth rates of 0.010, 0.019, and 0.041 for the 1950-1961, 1961-1974, and 1974-1988 intercensal periods respectively. The latter rate is higher than the national average annual growth rate for any intercensal period since 1887, including the concurrent 1974-1988 period, except for the 1926-1930 period. The national rate, conversely, was higher than the concurrent combined municipios' rate in each of the eight intercensal periods since 1926 except for the 1945-1950 and 1974-1988 periods and, since 1926, only dropped below the combined municipios' second highest post-1950 average annual rate of 0.019 once, during the 1940-1945 intercensal period.
when the national rate was 0.016. The next lowest national average annual growth rate since 1926 was 0.024 from 1930 to 1935 and all other intercensal periods recorded national rates greater than 0.026. The earlier onset of rapid growth in the two largest Olancho municipios is likewise seen in their average annual growth rates, which rose permanently to 0.030 or above in Catacamas during the 1945-1950 intercensal period and in Juticalpa during 1950-1961.

Of course, the use of combined absolute increase and growth rate measures for the smaller Olancho municipios masks considerable variation in the population trends between those municipios at a given time as well as within each municipio over time, examples of which can be seen in the graph of municipio populations (Figure 21). Perhaps the most striking development seen in the Olancho municipio population trends during the latter decades of the century was the meteoric rise of the Pech core municipio of Culmí between the censuses of 1961 and 1988. Between 1961 and 1974 Culmí’s population began to increase such that its total population graph assumed a slope comparable to that of Juticalpa and Catacamas and far steeper than any of the remainder of the Olancho municipios. It continued to rise on a similar slope from 1974 to 1988. During the 1961-1974 intercensal period, Culmí’s absolute increase of 6040 persons was the third largest in the department behind only Catacamas’ 9230 person increase and Juticalpa’s 12,177 and its average annual growth rate was the greatest in the department at 0.158. Following Culmí, the next largest 1961-1974 intercensal absolute increase in Olancho was San Esteban’s 1644 persons and the next largest average annual rate of growth was San Francisco de Becerra’s 0.044. Culmí’s 1961-1974 average annual
growth rate was the fourth highest average annual growth rate recorded in any Honduran municipio and the second highest of any Olancho municipio during the last four intercensal periods, that is, since 1945. The only three higher rates were all recorded during the five year intercensal interval between 1945 and 1950. Municipio Culmi's 1961-1974 average rate, in contrast, covered an eleven year span and resulted in an intercensal percent change of 573.06 percent, from 1,054 to 7,094 total inhabitants, which was by far the single greatest percentage change during any intercensal period of any Honduran municipio since the 1945 census. The next largest intercensal percent increase during that period was the 196.28 percent growth recorded by municipio Sonaguera of Colón department from 1950 to 1961. Between the 1974 and 1988 censuses, Culmi had the fourth largest absolute increase and the third highest average annual growth rate and intercensal percent increase in the department. Although its absolute increase during this time was 1703 persons greater than that of the prior intercensal period, its addition to the larger initial intercensal population produced smaller relative changes of 0.054 average annual growth and 109.15 percent change. Nevertheless, Culmi still ranked fifteenth among all Honduran municipios for each of these measures. The rapid rate of population growth over the last two intercensal periods lifted Culmi from last place in total population among Olancho municipios in 1961 to fifth in 1974 and to third, behind only Juticalpa and Catacamas, by 1988.

The neighboring Pech core municipio, San Esteban, has also experienced a significant and rapid increase in population since 1961. While its population growth was not as dramatic as that of Culmi between 1961 and 1974, San Esteban nevertheless
recorded the fourth largest absolute increase and the fifth highest average annual growth rate and percentage increase among Olancho \textit{municipios} during the intercensal period, which moved it from eighth to sixth place in total population in the department. It was during the most recent intercensal period, however, that San Esteban’s total population graph, like those of most of the other smaller Olancho \textit{municipios}, turned sharply upward reflecting a significant increase in the rate of growth over the fourteen year period. Between 1974 and 1988, San Esteban’s total population grew from 6,210 to 14,134 inhabitants as its average annual growth rate and intercensal percent change rose to the highest in the department. Not only did it lead the department in these relative measures, San Esteban’s 0.061 growth rate and 127.60 percent intercensal increase ranked seventh among all Honduran \textit{municipios} during the last intercensal period. The high growth rate resulted in the third largest absolute increase among Olancho \textit{municipios}, behind only Juticalpa and Catacamas, and moved San Esteban into fourth place in total population in the department by the end of the intercensal period.

The population histories of the Pech core \textit{municipios} are indicative of the rapid changes occurring in Pech region over the last half of this century. Both \textit{municipios} had relatively stable population levels from the beginning of the century until the 1945 census. Subsequent censuses revealed some, relatively gradual, increase in population in each \textit{municipio} until the onset of very rapid development after 1961 in Culmí and after 1974 in San Esteban. Each Pech \textit{municipio}’s average annual growth rate then led the department during the intercensal period in which its most rapid growth occurred. The Pech \textit{municipios} ranked eighth and last in total population among Olancho’s 22
municipios in 1961 but had risen to third and fourth place behind the two large towns by 1988. The dramatic change of slope in the total population lines and the high average annual growth rate statistics for these municipios during the latter half of the century suggests that their increased rate of population growth was not due to natural increase alone but was contributed to significantly by ladino in-migration. Field work has shown that the Pech are no longer a majority, nor even a substantial minority, component of the population within the municipios of their core region as would have been the case during the early decades of the century. The ladino populations of Culmí and San Esteban have far outstripped the Pech and it is unrealistic to believe that the current differential is a result simply of different rates of natural increase between the two subpopulations. As will be seen, the intercensal period marking the sharpest rise in the rate of population growth for each Pech core municipio corresponds to the times at which roads suitable for vehicular traffic were extended into each respective municipio. This correspondence suggests the importance of the role of improved access to the then thinly settled Pech territory in attracting ladinos into the Pech municipios.

Before turning to the migration statistics, however, we should expand our perspective on the historic population data once again to the national scale to better observe not just the absolute magnitude of population growth within the country, or a particular subregion of it, but also the national patterns of population growth across the country over the last century. National scale maps of population and population density enable a geographic perspective on the data to illuminate the progression of changes in the population patterns. We have seen the rapidity with which non-Pech population has
recently increased in the Pech core municipios. A historical-geographical view at the national scale increases our understanding of population growth as a national process that has, increasingly in recent decades, had important implications for the Pech region. It also serves to describe the development of that process within the country and to highlight the persistency of the eastern part of Honduras, including the Pech region, as a relatively lightly populated area into the latter half of this century. It is precisely this pattern of eastern Honduras as a historically relatively empty zone which is now becoming more densely populated that has allowed the Pech region to survive intact for so long compared to the indigenous regions of western Honduras and, conversely, that has only relatively recently brought drastic changes to the configuration of the Pech region and threatened Pech cultural survival.

The human population of Honduras has been concentrated in the western part of the national territory since pre-Columbian times. As part of the southeastern periphery of aboriginal Mesoamerica, the western portions of Honduras are believed to have been more densely occupied and intensely utilized by indigenous cultures than was its eastern half. In 1534, nine years after the Spaniards had established the first permanent settlement at Trujillo, Andrés de Cerezeda led a group westward to renew attempts at the establishment of more settlements (Chamberlain 1953: 28, 32) and thereafter the European-heritage population of the country has also been concentrated toward the west. Moving into the Olancho Valley from Comayagua in 1540, the Spaniards were finally able to establish themselves permanently in the interior of eastern Honduras by 1543 (Chamberlain 1953: 217-222) but, after the demise of Nueva Salamanca in the mid
1500s, four of the six main Spanish centers remained located in the western half of the country and only one in the eastern interior (Chamberlain 1953: 245). This pattern of western population concentration with a gradual eastward expansion has been an important theme in the population geography of Honduras which has persisted into and throughout the twentieth century and continues to play a major role in the Pech region today. This pattern during the last century can be seen in the municipio level census data displayed on population maps for the country since the census of 1887. Unless otherwise specified, the population data to be considered below do include the indigenous population as part of the total population of any particular political unit under discussion.

A comparison of maps of total population by municipio in 1887 and 1988 illustrates both the overall magnitude of population growth during that 101 year period and the persistence of the overall western concentration (Figure 22, Figure 23). It should be noted that the magnitude of total population growth during the period necessitates the use of varying scales for the population symbols between the two maps. This complicates comparison of the two maps but is necessary to avoid the abundance of excessively large or small graduated symbols that results from the use of a consistent scale for both maps. The area of the symbols are proportional to the data value that the symbol represents on each map, but the largest diameter circle is used for the maximum value of each data distribution. That is, the largest graduated circles on each map have the same size and represent the largest municipio population at that time, but the largest municipio population increased from 12,585 in 1887 to 624,542 in 1988, in Tegucigalpa.
Figure 22. Honduran municipio populations in 1887.
Figure 23. Honduran municipio populations in 1988.
for both years. Thus, on the 1887 map the largest symbol represents a value of 12,585 while on the 1988 map the largest symbol, which has approximately the same area as the largest 1887 symbol, represents a value of 624,542 persons.

The map of the population distribution of Honduras in 1887 shows the majority of the population concentrated in the southern and southwestern portions of the country while the distribution in 1988 can be seen to concentrate most heavily along a north-south axis from the Ulúa Valley to Choluteca. Within the department of Olancho, the population was spread thinly in 1887 but the majority, 26,034 people out of the department total of 31,132, could be found in the 15 municipios of the western half of the department, with a total of 20,403 in the 10 municipios of the southwestern quadrant. In reality, the majority of the population of Olancho in 1887 would have been concentrated along a band from the western border of the department through the Guayape Valley and the municipios to its north in the east-central part of the department. By 1988, the majority of the Olancho population was still concentrated along this central band but, as was the case in 1887, the map of municipio-level count data does not allow adequate discrimination of the detailed pattern.

The pattern of distribution of the population, and its changes over time, is more clear, however, on maps of the population density of each municipio. The population density for each 1887 municipio was calculated using the total population recorded in the 1887 census and the area of each historic municipio. The 1887 area data was calculated with the MapInfo computer mapping program from the municipio boundaries which had been reconstructed from the modern boundaries as described above. In two
important instances, however, the *municipio* boundaries have not yet been able to be accurately determined. The 1887 status of the boundary between *municipios* Tegucigalpa and Comayaguela in the department of Francisco Morazán and between *municipios* Rosa o Siriano and Yoro in the department of Yoro is uncertain. Those boundaries are represented schematically on the map, therefore, so that the data for all four *municipios* are displayed, but the area represented by the four cannot be assumed to be correct. Neither can density calculations based upon the area calculated for these schematic *municipios*, then, be correct. The data for each pair of neighboring *municipios* could be combined to get an accurate representation of the overall population density within each pair but this adjustment is not represented on the maps presented here.

Compared to the map of total *municipio* population, the 1887 population density map more clearly shows that the most concentrated areas of population were in the southwestern quadrant of the country (Figure 24). Excluding the Bay Islands, all of the *municipios* with population densities greater than 10 persons per square kilometer and all but three *municipios* with densities between 5 and 10 persons per square kilometer were located in the western half of the country. No *municipios* within Olancho had densities of 10 per km² or greater, and only Manto’s 3,444 inhabitants and El Rosario’s population of 743 persons produced densities greater than 5 persons per square kilometer.

In contrast, on the national scale, two zones of very sparsely inhabited territory can be identified in the north and eastern parts of the country. These *municipios*,
Figure 24. Honduras population density in 1887.
registering less than one person per square kilometer densities, correspond to the two zones of unconquered, indigenous-occupied territory that remained outside of effective Spanish control throughout the colonial period (Newson 1986 map: 335; Davidson 1985: 59-60). Their low population densities in 1887 indicate that they were still areas of limited settlement and utilization toward the end of the nineteenth century. Occupying a stretch of the north coast and extending inland along the east side of the Ulúa River, the two large municipios of Tela and El Negrito made up one such area at the time and was a remnant of the long unconquered territory of the Jicaque, or Tol, Indians. To the east, the much larger area of thinly settled and uninhabited land stretching from central Olancho to the eastern tip of the country was evidence of the persistence of the colonial frontier territory of indigenous-occupied Taguzgalpa. The territory of the department of Olancho was then divided roughly into its eastern and western halves along municipio boundaries by the one person per square kilometer population density classification. The eastern sector of less than 1 per km² density was comprised of only the three municipios of Gualaco, San Esteban, and Catacamas at the time, however, and this obscures somewhat a more accurate determination of the limits of settlement and relatively dense population in eastern Olancho. Likewise, the greater concentration of population along the eastern littoral of municipio Trujillo at the time, when compared to its interior regions, is obscured by the large size of its territory, which lies to the east of Olancho.

In our later consideration of settlement locations in Olancho, it will be seen that the central corridor of settlement and denser population extends into northeastern Catacamas but also that most of the southern and eastern portions of the municipio were
uninhabited or very sparsely settled, primarily by indigenous peoples. The overall impression of a large uninhabited, particularly by ladinos, frontier zone is, therefore, confirmed.

The changing national demographic pattern resulting from the rapidly increasing population during the last half of the current century is illustrated by a series of municipio population density maps for the years 1945, 1950, 1961, 1974, and 1988 (Figure 25, Figure 26, Figure 27, Figure 28, Figure 29). The population density values for this series of maps were calculated using the total population recorded in each municipio by censuses conducted in each of the years represented and the official land area of each municipio as reported by the Dirección General de Estadística y Censos in the 1988 census. The area values of new municipios created during intercensal periods were combined with those of their parent municipios to calculate the aggregated areas within the ancestral boundaries as needed for each census year to match the historic boundary maps. The 1988 population density map shows that one hundred years after the 1887 census the overall national pattern of greater population densities in the west and lower densities in the east has persisted although the magnitude of population density values has everywhere increased. By 1988 no municipios remained with population densities of less than 1 person per square kilometer and only four, all in the eastern half of the country, remained with densities of less than 5 persons per square kilometer.

Between 1887 and 1945 the total population of Honduras increased from 331,917 to 1,200,542 (DGEC 1981: 31, 143). The map of 1945 municipio population

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Figure 25. Honduras population density in 1945.
Figure 26. Honduras population density in 1950.
Figure 27. Honduras population density in 1961.
Figure 28. Honduras population density in 1974.
Figure 29. Honduras population density in 1988.
densities shows a large increase in territory populated with 10 or more persons per square kilometer since 1887. Almost all of the mainland municipios that registered such densities were located in the southern and western parts of the country except for a large area in north central Honduras covered by the three municipios of La Ceiba in Atlántida department and Olanchito and Arenal in Yoro department. The eastern half of the country was still dominated by municipios with densities of less than 5 per km², including three large municipios comprising probably over half of the eastern low density territory, that still had densities of less than one person per square kilometer. The department of Olancho shows a densification to greater than five per km² in the municipios of its extreme western edge, which are drained by the headwaters of the Río Guayape, and along a central corridor through the western half of the department that largely comprises the drainage basin of a tributary of the Guayape, the Río Telica, while most of its more central territory to the north and south of the denser corridor remained at densities of less than five per km². Two of the municipios that had registered densities of less than one per km² in 1887, Gualaco and San Esteban, had by 1945 exceeded that level but were still populated with less than five per km². The easternmost 1887 Olancho municipio with a density of less than one per km², Catacamas, continued to be populated at the lowest rate although its 1887 territory now contained two municipios after the creation of Dulce Nombre de Culmí in 1898. The department as a whole continued to manifest the 1887 division between its more densely populated western and less densely populated eastern portions albeit with an eastward shift in the northeastern limit of the one person per square kilometer municipios and the development of a significant number
of municipios with five or more persons per square kilometer densities in its western half. East of Olancho, a single large municipio, Iriona of Colón department, covered the remainder of the country and contained less than one person per square kilometer of its territory.

The national population census of 1950 provides population data for the country that illustrate the demographic situation five years after the 1945 census. The total population of the country increased by 13.998% during this brief interval from 1,200,542 to 1,368,605 residents (DGEC 1981: 143, 165). The population increase appears to have served primarily to densify the already more densely inhabited municipios, strengthening the contrast between eastern and western Honduras without changing the overall national pattern of population densities. During the span, twenty more municipios, primarily in western Honduras, had risen above 10 persons per square kilometer densities while the three eastern municipios maintained densities of less than one per km². While most of the Olancho municipios that had densities from one to five persons per square kilometer in 1945 continued to fall within that category in 1950, density increases in the Telica corridor cause it to stand in even greater contrast to the rest of the department than it had in 1945. A comparison of the 1950 and 1887 population density maps shows the demographic situation at mid-century to have been similar to that near the turn of the century in terms of a readily identifiable west to east gradient of decreasing population density but with a much steeper gradient. The average density of western Honduras had increased substantially while that of far eastern Honduras, as measured at the municipio level, had remained basically the same. The
eastern limit of less than one per km\(^2\) densities had advanced only slightly into the northeastern part of its 1887 extent during the first half of the twentieth century, leaving most of the territory of the 1887 eastern zone of minimal population density at its earlier low level of habitation.

The 1961 population census reveals a continuation of densification throughout western and into central Honduras as well as a significant retreat of the eastern limit of one person per square kilometer densities. The total population had increased from 1,368,605 to 1,884,765 persons since 1950 (DGEC 1981: 165, 181) and for the first time municipios with population densities greater than 100 persons per square kilometer had developed in western Honduras. The eastward advance of higher densities is seen in the rise of population densities to above one per km\(^2\) within only two municipios, Catacamas and Iriona. The incorporation of the large territories of these two municipios into the higher classification, however, results in a large relative decrease in the total area remaining with less than one per km\(^2\). The ability to discern an increase in the density of Iriona is attributable in part, in addition to a probable actual increase of population within its territory, to the evolution of Honduras’ internal territorial divisions during the preceding intercensal period. The new department of Gracias a Dios was created in 1957 from the portion of the territory of municipio Iriona lying east of the 85°W meridian (DGEC 1980: 423; Fiallos 1991: 203-204). Thus, the former territory of Iriona was divided into three municipios comprising the remainder of the its former territory west of the 85°W meridian and the two new municipios of Gracias a Dios, the boundary between which was placed at the Río Patuca (Fiallos 1991: 204). The slightly finer
resolution produced for eastern Honduras by the new subdivisions makes possible the determination of the now smaller Iriona's population density as greater than one person per square kilometer. Its actual population density in 1961 was 1.076 persons per square kilometer, just over the classification boundary of one per km². Since the municipio's density was barely over the cutoff, it seems likely that actual population growth within its boundaries since 1950 would have contributed to its rise in classification rather than said rise being simply attributable to its reduced area. Nevertheless, without the creation of the new subdivisions the entire area of the 1950 municipio Iriona would still in 1961 have been classified below one person per square kilometer density, as it had been prior to that time and as the Gracias a Dios portions of it still were. The overall population density in the territory of 1950 Iriona was in 1961 0.742 persons per square kilometer.

The population density of municipio Catacamas in Olancho also rose above the one per km² level during the intercensal period but, since it had not been further subdivided, the increase was attributable to population growth alone. It should be remembered, however, that Catacamas' population growth was concentrated in the northwestern part of the municipio, in and near the cabecera of Catacamas, and that large areas in the south and east of the municipio, as was also the case in the interior of municipio Iriona, remained practically uninhabited. The population densities of the municipios in Olancho's southwestern quadrant also continued to increase during this time. Perhaps the most notable of these in terms of the eastward progression of the chosen categories of population density was the rise of the large municipio of Juticalpa, the departmental capital, above the five per km² density.
The only municipio west of Gracias a Dios to register a population density of less than one person per square kilometer in 1961 was the easternmost municipio of Olancho, and one of the core municipios of the Pech region, Dulce Nombre de Culmí. Municipio Culmí and the department of Gracias a Dios, then, were the last territories to maintain population densities in the lowest category. Still in 1961 evidence of the isolation of the Pech in this municipio, and across the municipal border in northern San Esteban, from centers of ladino settlement and improved roads can be seen in the municipio level population data. About this time, however, the ladino presence began to increase significantly in far eastern Olancho, a demographic change which can be seen clearly in the next census. By the time of the 1974 census no municipios in the country would remain with total population densities less than one person per square kilometer.

Between 1961 and 1974 the national population grew from 1,884,765 to 2,656,948 inhabitants (DGEC 1981: 181, 203). The continued densification of western and central Honduras is seen in the now nearly complete population of these parts of the country by densities of greater than 10 persons per square kilometer as well as in the increase in area populated at densities greater than 100 persons per square kilometer. These most densely populated municipios were almost exclusively associated with the national capital of Tegucigalpa and the urban, industrial, and port facilities of northwestern Honduras surrounding San Pedro Sula and Puerto Cortés. In eastern Honduras a clear distinction can be seen between the municipios registering densities of greater or lesser than 10 persons per square kilometers. This boundary remains practically unchanged by the time of the 1988 census. In 1974, however, this division
did not simply separate municipios with greater or lesser than 10 per km² population densities but along most of its length actually marked a much sharper reduction in density from 10 or more persons per km² to less than five persons per km². Except for the municipios of Mangulile and Guata in northern Olancho, no municipios with population densities ranging from 5 to 10 persons per square kilometer occur to form a transitional zone between the more densely populated west and the less densely populated east. And only in the eastern third of the country, an area including the department of Gracias a Dios and the eastern halves of the departments of Colón and Olancho plus a band of municipios in northwestern Olancho, could population densities of less than five persons per square kilometer be found.

As low as the densities were in eastern Honduras compared to the rest of the country, the density everywhere was greater than one per km². This represents an increase within the cartographic classification for the three 1961 municipios that had at the earlier date still registered densities of less than one per km². By 1974, at the municipio level, the one person per square kilometer frontier of Honduras had been closed. Some virgin territories still existed in the east, as they do to this day, but the overall population density of every municipio was now greater than one per km².

During the following intercensal period, Honduras' population grew to 4,443,721 (DGEC 1991: 1). The ten persons or greater per square kilometer line remained remarkably stable in spite of the national 67.25 intercensal percent increase over that span, a fact no doubt attributable in part to both the continued concentration of population in the west and the large areas of the eastern municipios which allowed them
to absorb population increases without raising their overall population densities excessively. In the west, a further increase in the number of municipios registering densities greater than 100 persons per square kilometer since 1974 can be observed. Again, most of these municipios contain urban centers but now more regional centers, such as Santa Rosa de Copán, La Ceiba, Siguatepeque, and La Paz, have risen to the highest classification in addition to the areas surrounding Tegucigalpa and San Pedro Sula. In the east, although the ten per km² boundary held its position everywhere except for municipios Guata and Mangulilé, which themselves rose from the five to ten per km² category into the ten to one hundred per km² category, the population increase can be seen in the increased densities of most of the municipios of eastern and northern Olancho and one municipio in eastern Colón. Three municipios of eastern Olancho, Catacamas, San Esteban, and Culmi, three municipios of northeastern Olancho, La Union, Esquipulas del Norte, and Jano, and municipio Limon of Colón department all registered increases in population density from less than five per km² to five or more per km² since 1974. Only four municipios, the Olancho municipio of Gualaco and the three municipios carved out of 1950 Iriona, Iriona, Colón, and Brus Laguna and Puerto Lempira, Gracias a Dios, continued to have population densities of less than five per km² in 1988. In terms of the impacts of population growth during the last intercensal period on the Pech region, the three eastern Olancho municipios most closely associated with the Pech, including the two Pech core municipios of Culmi and San Esteban, all increased their population densities from less than five per km² to between five and ten persons per square kilometer. San Esteban had registered a population density of
between one and five per km² since at least 1945 and Catacamas had registered a population density within that range since 1961. It was not until the 1988 census, however, that both of those municipios’ populations had grown sufficiently to produce densities of five or more persons per square kilometer. Municipio Culmí had not registered a population density of one or more persons per square kilometer until the 1974 census and already by 1988 its density had risen to five or more persons per km². Culmí was the only municipio in Honduras to move from a population density of less than one person per km² to greater than five persons per km² between 1961 and 1988. Culmí and Catacamas were the only two municipios to move from a population density of less than one person per km² to greater than five persons per km² between 1950 and 1988. Clearly, then, the population density patterns support the assertion of the absolute and relative change measures calculated from census statistics that eastern Honduras has experienced relatively rapid growth and change, although certainly not comparable in absolute magnitude to other parts of the country, during the last half of this century.

Regions of Change and the Role of Migration

The population statistics and patterns discussed above provide strong indications of ongoing change within the Pech region and the country as a whole. The nature of change in any particular place is less obvious, however. The processes of population growth and the impacts of growing populations and increasing population densities cannot be discerned from perusal of the total population data alone. They tell us nothing of the mechanisms by which population change has occurred nor of how social, cultural, and economic systems of the Pech region, as well as the landscape itself, have changed in
response to the increased numbers of persons there. Population can grow via processes of reproductive change or migration and differences in the relative contribution of these two sets of processes to change within a region can make a profound difference in the nature of the changes experienced there. The most fundamental change in the Pech region over the last century, from the perspective of this study, has been the shift from the numerical and cultural dominance of the Pech to that of persons of ladino heritage. Details of some of the concomitant changes in the geography of the Pech region will be examined in later sections. Here we will examine, within the limits of the available evidence, the important contribution which processes of migration have made in determining the direction of this most fundamental change in the Pech region as well as the direction of change within the country. This examination will highlight the national migration trends and the place of the Pech region as an emergent area within the national pattern.

The rate of growth of any region is, of course, the result of the combined processes of natural increase, or reproductive change, and migration (Bogue 1969: 37-38; Woods 1982:14-18; Pollard, Yusuf and Pollard 1974: 16-17, 103; White and Woods 1980a: 6). A more rapid than average growth rate in a municipio could have resulted, therefore, from a either a higher than average rate of natural increase or a positive net migration over the intercensal period, or a combination of both. Lacking complete birth, death and migration records for the period, however, makes it difficult to determine the relative roles of reproductive change and migration in the intercensal population change of any particular municipio. If an equal rate of natural increase is assumed throughout
the country, of course, the differential growth among *municipios* would be attributable
to the balance of migration. Such an assumption is certainly incorrect but it does seem
likely that migration rates would show greater variation across the country than would
The wide variation in growth rates among different regions of the country suggests,
therefore, that factors other than differential rates of reproductive change are at work
encouraging a redistribution of the population.

Population growth within a region invariably causes changes to that region. At
the very least, the basic demography, in terms of total population in the region, changes
over the period during which the population has grown. Any significant growth is likely
to create changes in other demographic patterns, such as the age distribution of the
population, as well as changes in the geographic and economic patterns of the region as
settlement, infrastructure, and occupational systems expand to accommodate more
persons. The processual nature of population growth, whether it is derived from
reproductive or migration processes, however, plays a role in determining the direction
of change. Beyond the simple expansion of human systems that might be expected from
in-situ increase of the resident population from reproductive processes, greater changes
in the structure of those systems is likely to result from population growth that has a
significant contribution from migration. The movement of people with social and
cultural characteristics different from those of the destination region into an area
introduces new attitudes and ideas that can profoundly alter the patterns of life in their
new home (White and Woods 1980a: 1-3). White and Woods termed such impacts upon
the migrant's destination, as well as changes resulting from the loss of individuals in the region of origin, "the geographical impacts of migration" (1980a: 2) and included the identification these effects of migration among the basic questions addressed by migration studies (1980a: 1). Bogue noted that one of the fundamental characteristics of the migration process is that it serves as "an instrument of cultural diffusion and social integration" by bringing together individuals of different backgrounds and by increasing the ties linking migrants' regions of origin and destination (1959: 487). This cultural diffusion and social integration is, at one scale, a geographical impact of migration and, on a more detailed level, an important force in directing structural changes in the social, cultural, and economic systems of the destination region.

In their edited volume, _The Geographical Impact of Migration_, White and Woods summarized the basic questions of migration studies as:

1. Why does migration occur?
2. Who migrates?
3. What are the patterns of origins and destinations and of the flows between them?
4. What are the effects of migration on the areas, communities or societies that the migrants come from?
5. What are the effects of migration on the areas, communities or societies of destination? (White and Woods 1980a: 1)

While recognizing that population geographers have traditionally been most interested in the third question because of its overt spatial concerns, they described the closely interrelated nature of the questions and encouraged a broader scope for geographical studies of migration (1980a: 1-3).
The role of migration study in this work will not be one of answering each question as it pertains to the Pech region, however, but to illuminate the nature of that region as an emergent area within the country of Honduras that is undergoing rapid change which is felt most acutely by its traditional indigenous inhabitants. As such, we will examine the migration data to better understand the national patterns of population movement as a contributor to population growth and distribution and for clues to the relative contribution of migration to the overall population growth and structural change in the Pech region. This approach is determined both by the nature of the data available on Honduras’ internal migrations and the focus of this study upon the Pech region within Honduras. The point that the Pech region has experienced recent rapid population growth has already been made and some of the impacts of that growth will be examined in later sections. Consideration of migration processes will deepen our understanding of the nature of that population growth and its impacts. We will be concerned primarily with the patterns of origin and destination of migrants and of the effects of migration, as part of the overall population growth, upon the Pech region. These concerns are covered by the final three questions presented above. The first question posed by White and Woods above necessarily involves factors at both the migrants’ regions of origin and destination and will not be dealt with here except to say that the low population densities and national lands of the eastern interior are assumed to have served as attractions to the region for agriculturalists and timber interests and that improved access to the eastern interior via the extension of new roads into the area promoted or facilitated the in-migration once the decision to migrate was made for whatever reason. White’s and
Woods' second question of who migrates is concerned with identifying the physical, social and cultural attributes of the migrants themselves so that directions of change can be related to the increased presence of those characteristics in the destination region. Practically no data of this type are available for migrants to the Pech region and no attempt will be made to correlate changes there with migrant characteristics, with one very important exception. In terms of the most fundamental change in the Pech region during the last century, that of the numerical subordination of the Pech population to the ladino, the most important characteristic possessed by practically every in-migrant is that of ladino heritage. This migrant characteristic is not documented in the available data, however, and an effort will be made to support the assumption with the data that are available.

Regions of Rapid and Sluggish Growth from 1974 to 1988

As indicated by the series of population density maps, the eastward expansion of national systems has progressed throughout the last century to gradually incorporate the country's more eastern territories into the national sphere and this process has most significantly impacted the Pech region during the latter half of the twentieth century. The eastern interior, comprising the eastern portions of Colón, Olancho, and El Paraíso departments, has during the last four decades emerged as an area of rapid growth and development relative both to itself in prior decades and to other parts of the country now and in the past. The rise of this area as a region of rapid development and its relationship to the rest of the country bears some examination to improve our understanding of the
current and historical processes that have brought major changes to the Pech and their region.

Although several studies have considered Honduran population growth and internal migration, none have used the data collected during the most recent, 1988, census of population and housing to analyze these processes at the municipio level. Comparison of the population statistics for each municipio with those collected during the previous, 1974, census yields a detailed pattern of population changes for the country and allows the identification of faster growing versus slower growing regions. The census was conducted in May of 1988 and included a question on the respondents’ place of residence in 1983. The data collected in response to this question can be used to examine the patterns of population movement between municipios during the 5 year period.

Honduras’ annual rate of natural increase has been estimated at slightly over 3 percent (Population Reference Bureau 1990; Davidson 1994). According to data collected by the Dirección General de Estadística y Censos, the country’s population grew from 2,656,948 at the time of the 1974 census to 4,443,721 at the time of the 1988 census (DGEC 1981: 1; DGEC 1991: 1). This means that the 1974 population grew 67.249 percent during the census interval, which equates to an annual rate of total increase of 3.7 percent. This growth rate would include the balance of immigration and emigration and assumes that the census counts were conducted at the same time of the respective census years. As would be expected, however, the 67 percent national increase was not spread evenly throughout the country and calculations of the
percentage change in total population from 1974 to 1988 for each municipio reveal a wide range of growth rates across the country.

The rapidity of recent growth in the Pech municipios, as well as others of interior eastern Honduras, relative to the other municipios of the country is illustrated by a map of the 1974-1988 intercensal percent change of each municipio (Figure 30). The map allows the identification of faster growing versus slower growing regions of the country as measured by the intercensal percent change and the average annual growth rate during the fourteen year period. All municipios registering an intercensal percent change equal to or less than the overall national figure of 67.249 are classified together in the lowest category to highlight areas of more rapid growth. It can be seen that the 67.25 percent national increase was not spread evenly throughout the country but was concentrated primarily within a few discernable zones corresponding largely to a corridor stretching from Tegucigalpa to San Pedro Sula, a small cluster on the Pacific coast lowlands, a band along the north coast and the Bay Islands, and a belt of municipios in interior eastern Honduras, many of which have low population densities and are associated with the eastern colonization front. In all, of the 282 municipios in existence in 1974, only 68 recorded a population increase equal to or greater than the national figure and 214 municipios, over 75 percent of all 1974 municipios, therefore, had recorded less than a 67.249 percent increase in their population by 1988. Slower than average growth in a municipio could have resulted, of course, from a lower than average rate of natural increase or a negative net migration. Fifty-four municipios, 19 percent of the total, recorded an intercensal population growth of 75 percent or greater and only 22
Figure 30. Municipio population changes from 1974 to 1988.
municipios, about 8 percent of the total, doubled their population, that is, they registered a percent increase of 100 or greater, during the intercensal period. The fastest growing subset further highlights the national capital, northern portions of the San Pedro-Tegucigalpa corridor, central Colón, and the eastern interior zone as areas of rapid change from 1974 to 1988.

This analysis does not attempt to explain definitively the causes of greater or lesser than average growth within all of the zones mentioned above, except to note that several factors associated with the rapidly growing areas might serve to attract migrants to them thereby contributing to higher rates of growth. These include the attractions of the larger regional cities; the extension of improved transportation routes; and the greater economic opportunities offered in the less urbanized areas such as level or productive agricultural lands on the Pacific coast, around Comayagua and Siguatepeque, around the north shore of Lake Yojoa, and in the Ulúa and Aguán Valleys, open lands available for colonization in the eastern interior and development associated with the El Cajón hydroelectric dam. Later we will see that these assumptions cannot be fully supported by the available migration evidence, particularly for the southern coast cluster. Of specific interest to this study is the role of migration in the Pech region and its associated municipios and this will be examined in more detail.

Internal Migration Data

The 1988 census collected information on the migration characteristics of the population by recording the 1983 place of residence, five years prior to the census, of each respondent. The data collected by this question can be used to examine the patterns
of population movement between municipios during the 5 year period from 1983 to 1988. These data can be represented in tabular form with the 1988 municipio population that is 5 years old or greater in rows and the surviving 1983 municipio population in columns. Each cell of the table, then, represents the number of 1988 residents of the row municipio that were living in the corresponding column municipio in 1983. Of course, most persons did not change their municipio of residence during the 5 year period so the largest value in each row occurs at the intersection with its 1983 counterpart. This is the number of 1983 residents that did not move out of the municipio by 1988. The other cells in the row indicate how many people, age 5 years or more, moved into the municipio from every other municipio since 1983.

Honduras had a total of 282 municipios at the time of the 1974 census. By 1988, that number had grown to 290. Seven of the 8 new municipios were created between 1983 and 1988. The census records migration data for these newest municipios but the potential for errors in reporting the place of previous residence seems to be great. For example, 100 percent of the population of a new municipio could report itself as having lived in another municipio 5 years prior without anyone having changed residences in the interim. Likewise, a person who moved from the area that became a new municipio into the remaining area of the parent municipio prior to the creation of the new municipio faces a decision in answering the census taker’s question. Before they moved they were living in the parent municipio. But now their old house is in another, new municipio. Does the respondent say that they were living in the old or the new municipio? To reduce the possible reporting error caused by this confusion of population movement
with political boundary changes, the data for the 7 new municipios were combined with those of their respective parent municipios. Any person reporting residence in either a new municipio or its parent municipio in 1983 was counted as a resident of the parent municipio for the purposes of this analysis. Therefore, the migration streams between a new municipio and its parent were counted neither as in- nor out-migration but rather as non-migrants or permanent residents of the parent municipio. The municipio of La Lima, in the department of Cortes, was created in 1981 and was therefore retained in the migration tables. This results in a total of 283 municipios available for migration analysis.

The Honduras municipio migration matrix, therefore, contains 80,089 cells and represents 79806 total possible in- or out-migration streams. That is, 282 migration streams to or from each of the 283 municipios that were in existence in 1983. Not included in this matrix were international immigrants and respondents whose 1983 municipio of residence was unknown. The 104,646 respondents with indeterminate municipios of prior residence accounted for only 2.35 percent of the total 1988 population but, more importantly for our internal migration analysis, they represented 31.2 percent of the combined internal migrants and unknown responses.

Internal Migration Patterns

Like the latest intercensal percent growth calculations, the internal migration data also show a wide range of net migration rates across the country and again show the zones around the two largest urban centers and the eastern frontier to be among the highest ranking areas (Figure 31). Over the 5 year migration interval, 214 municipios
Figure 31. Net migrations of Honduran municipios from 1983 to 1988.
experienced a negative net migration while 69 had a positive net migration. Three municipios associated with Tegucigalpa and San Pedro Sula—the Distrito Central, San Pedro Sula, and Choloma—each registered a net migration of over 6,000 persons, which was far in excess of La Lima’s fourth ranking 2,654 net migrants. La Lima, itself a neighbor of San Pedro Sula, was likewise far ahead of the next highest ranking municipio, which had a net migration of 1,841 persons. A total of twelve municipios registered a net migration of greater than 1,000 persons and each of these is directly associated with one of the two large urban centers or, in the cases of Siguatepeque, Roatan, Trujillo, and Catacamas, with an important regional settlement center. Catacamas and, to some extent, Trujillo are also associated with the eastern frontier zone. When the 33 municipios with between 100 and 1,000 net migrants are added to the picture, the association of positive net migration with the major cities, important regional towns, the north coast, and the eastern frontier is even more evident.

When the municipios’ net migration for the period is divided by their mid-migration-period populations to establish their net migration rates, of course, the 69 municipios with positive net migrations are also the only municipios with a positive net migration rate (Figure 32). Their relative rankings are changed, however, to reflect the proportion by which their baseline populations were increased via migration. Only Roatan and Choloma received a balance of migrants that was greater than 10 percent of their mid-period populations. Of the 15 total municipios whose net migration rates were greater than 5 percent, seven either contained the two major cities or were their immediate neighbors and 3 were near the eastern frontier.
Figure 32. Net migration rates of Honduran municipios from 1983 to 1988.
Curiously, the net migration data do not identify all of the fastest growing *municipios* identified by the intercensal percent change calculations. The data show that 69 municipios grew at faster than the national average from 1974 to 1988 and that 69 municipios had a positive net migration from 1983 to 1988 but the lists of municipios in each category do not correspond exactly. Even some of the municipios that had a 75 percent or greater growth in total population from 1974 to 1988 are not among the municipios with a positive net migration between 1983 and 1988. Assuming that the total population and migration data are accurate, the conflicting results could be attributable to a higher than average rate of natural increase in, or international immigration to the anomalous municipios, to a changing pattern of internal migration such that the anomalous municipios had a positive net migration prior to 1983 but a negative net migration thereafter, or to a sufficiently large percentage of “unknown” responses to the census migration question in the anomalous municipios.

**Urbanization**

Although it is classified as one of the least urbanized countries of Central and South America (Davidson 1994; Population Reference Bureau 1990), and perhaps precisely because it does not yet have a majority urban population, the concentration of Honduras’ residents in agglomerated settlements is proceeding apace. Gibson detailed the development of Honduras’ urban system through the 1950s and he identified several discernable subsystems that had developed within the urban system of the country by 1930. The two major subsystems were comprised of the settlements of the north coast and of the settlements scattered among the interior upland basins. He also identified “the
residual sub-systems of the south coastal area and the Islands" (1970:114). The continuing growth and influence of these settlements on the population patterns of the country today is clearly seen in the population growth and internal migration data presented above. Davidson described the more recent status of urban development in the country:

The process of urbanization in Honduras is, for the most part, a tale of two cities. Tegucigalpa, the capital, and San Pedro Sula, the industrial center, are the only truly urban places. These cities currently dominate the urban scene of the country, and they are expected to continue in that role. However, a few other places were important during the colonial period, and as population concentrations increase throughout the country, some of those early centers have become regional foci; in the future they might rival the two major centers. (Davidson 1994:313)

The state of urbanization in Honduras and the dominance of the two largest population agglomerations in the urban system are illustrated by data from the 1988 census, which registered a total of 1,674,944 inhabitants of urban areas and 1,673,976 inhabitants of urban places out of its uncorrected total population of 4,248,561, giving an urban percentage for the country of 39.42 and 39.40 percent urban, respectively (DGEC 1990:1, 21). The Distrito Central contained 14.05 percent of corrected population total and the combined populations of the Distrito Central and municipio San Pedro Sula contained 21.41 percent (DGEC 1991). The combined populations of Tegucigalpa and San Pedro Sula accounted for 48.38 percent of the country's population living in urban areas (DGEC 1990).

In addition to the net migration statistics presented above, the dominance of these two cities in the population structure of the country is reflected in other patterns observed in the internal migration data. 28.9 percent of all known intermunicipio
movements during the period had either Tegucigalpa or San Pedro Sula as their
destination and 164 of the 283 municipios sent their largest contingent of out-migrants
to either Tegucigalpa or San Pedro Sula (Figure 33). Tegucigalpa received in-migrants
from every other municipio in the country and San Pedro Sula received in-migrants from
all but 11 of the 283 municipios. A map of the 1983 municipio of residence of the 1988
population that is 5 years old or greater in a particular municipio illustrates the 1983
distribution of that municipio's 1988 residents. Such maps for the Distrito Central and
San Pedro Sula show the wide area from which both municipios drew migrants during
the five year period (Figure 34, Figure 35). The importance of urbanization in general is
further highlighted by the fact that the municipios containing the ten largest population
centers in the country (listed in Davidson 1994: 320) were the recipients of 108,596 in-
migrants, which accounted for 47 percent of all known intermunicipio movements from

The Eastern Frontier

Although the absolute magnitude of population growth and in-migration of the
frontier zone is far below that of the collective population agglomerations in the country,
the changes wrought by these processes make the eastern frontier of settlement and
economic activity in Honduras an area of interest and concern. Because of its magnitude
relative to the urban processes in the country, the frontier has been much less studied by
population geographers and demographers. Rather, the region has been a focus for
scholars more concerned with the impacts of rapid change on the natural environment
and indigenous peoples in the region. Indeed, it is the attempt to better understand Pech
Figure 33. Dominant migration flows to Tegucigalpa and San Pedro Sula.
Figure 34. Migration field of Tegucigalpa from 1983 to 1988.
Figure 35. Migration field of San Pedro Sula from 1983 to 1988.
Indian territorial loss and population subordination to *ladinos* resulting from the recent advance of the frontier into the Pech region that has led us to here consider demographic history and processes. In addition to urbanization, however, frontier expansion is also a second major theme in the evolving population pattern of Honduras and worthy of study for that reason alone.

From north to south, the eastern frontier of settlement and economic activity in Honduras cuts across the eastern parts of the departments of Colón, Olancho, and El Paraíso. This frontier is rather well defined on its southern end but is more ambiguous in the north because of the thin line of settlement following the Río Paulaya cuts through the middle of a largely uninhabited tract. Taking the Paulaya as the forward edge of the frontier in the north, the leading edge of settlement extents roughly from Cabo Camaron on the north coast to the Nicaraguan border in Trojes, the easternmost *municipio* of El Paraíso. Beyond the frontier is a zone of sparsely inhabited land, much of it tropical rain forest. This is a hollow frontier, however, for as you continue eastward, the population concentration increases again in the coastal villages and riverine settlements of the Mosquitia littoral.

At the national scale, the modern frontier has advanced eastward only marginally beyond the western limits of colonial Taguzgalpa, that eastern portion of what is today Honduras which remained outside of the control of Spanish authority (Figure 36). Franciscan efforts to evangelize the native peoples of Taguzgalpa and settle them in *reducciones* were only temporarily successful and by Independence in 1821, the area was still outside of effective Spanish control (Añoveros 1988, 53; Chapman 1958, 21–22;
Figure 36. Honduras' 1988 population density and the colonial frontier.
Helms 1976, 8). Although the modern population density drops off sharply not too far east of the western border of Taguzgalapa, the eastward progress that has been made has already greatly impacted the tropical broadleaf montain forests and cloud forests in the region as well as the lands and culture of the Pech Indians. Continued eastward movement threatens to further disrupt Central America’s largest remaining tract of lowland tropical rain forest, which includes the Río Plátano Biosphere Reserve, and the less-acculturated Tawahka Sumu Indians.

The municipios of eastern Honduras that rank among the highest in the country in the rates of intercensal population change and net migration generally contain either portions of the frontier itself or of the rapidly filling territory just behind it. Of course, not all of the population increase in these municipios concentrates at the leading edge of settlement. In fact, most of the population increase contributes to filling in the still relatively less densely occupied lands lying behind the frontier’s leading edge. A comparison of the maps of the 1974 and 1988 settlement populations in the frontier municipios of the Pech region illustrates this point (Figure 37, Figure 38). In addition to the attraction of the open lands of the frontier, three of the eastern municipios that grew by 100 percent or more between 1974 and 1988, Trujillo, Catacamas, and Danlí, also contain large towns located near the eastern terminus of paved roads that serve to attract migrants to their territories and facilitate access to the regions beyond.

The rankings of most of the frontier zone municipios among the 25 percent of municipios with either a greater than average intercensal population growth rate or a positive net migration from 1983 to 1988 has already been noted. Frontierward
Figure 37. 1974 settlement populations in Culmi and San Esteban.
Figure 38. 1988 settlement populations in Culmi and San Esteban.
migration from other, more densely populated and environmentally difficult, parts of the country, especially southern Honduras, has been suggested or documented by various authors. Maps of the 1983 municipio of residence of the 1988 population 5 years old or greater show that, while many in-migrants arrive in a particular municipio from nearby municipios, as would be predicted by gravity models of migration, the frontier municipios do receive migrants from central, southern, and western Honduras as well (Figure 39, Figure 40).

As ladino population densities and the front of ladino settlement has crept eastward over the last century, the core of the surviving Pech region in northeastern Olancho has been overtaken by the advancing frontier. The increased interaction with ladino society has served to incorporate the Pech communities into the national political, social, and economic systems, albeit at the lowest levels of each. We can now turn to a more detailed consideration of the population history of the Pech region over the last century or so in search of a fuller understanding of the impacts of ladino population increase on the Pech settlement patterns and territorial control. A later chapter then examines the social and economic changes in the core Pech communities resulting from the national and local demographic processes and patterns.
Figure 39. Migration field of Culmi from 1983 to 1988.
Figure 40. Migration field of San Esteban from 1983 to 1988.
INDIGENOUS LANDS IN A DEVELOPING REGION:
A HISTORICAL ETHNOGEOGRAPHY OF THE PECH INDIANS OF EASTERN HONDURAS WITH EMPHASIS ON RECENT SETTLEMENT AND LAND USE CHANGES

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in

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by

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CHAPTER 7

Recent Pech Population and Settlement

Introduction

Some data exist to provide an indication of Pech population geography and demography changes over the last century or so. There are, however, difficulties in arriving at a meaningful interpretation because of the variety of formats in which the data are presented. We will examine the available data to achieve as detailed an understanding as possible but it should be remembered that said understanding is necessarily ambiguous and that only the broadest conclusions can be accepted with some certainty. The primary conclusion reached regarding Pech population patterns is that the Pech appear to have increased their total numbers over the last century but the population increase has not kept pace with ladino population growth in their region.

Difficulties in interpreting the Pech population data over the last century arise from several sources. Aside from the perpetual concerns over the fundamental accuracy of the collected and reported data themselves, the data reported by various reports and official censuses are not geographically consistent and therefore cloud comparisons between counts or estimates made at different times by different agents. Pech population figures are reported in greater geographic detail in some reports than in others by variously specifying a larger number of sites of Pech occupation or by agglomerating the
data and reporting totals for on the larger settlements that include the associated smaller settlements. This varying geographical resolution of the data is no doubt related to the traditional pattern of many Pech of maintaining residences in both the major settlement in the area as well as in an outlying area where agricultural lands are located. Thus a report could report a figure for the major centers, where many of the outlying Pech also maintained a residence, and their associated outlying populations or it could report a figure for each of the identified caseríos of the major centers. When a less detailed report is made, however, we can not be certain which outlying settlements were included as part of each major center. The practice of keeping a field house away from the larger settlement is still known but is somewhat less common among the Pech now that they have left Culmí and occupied even more permanently the sites close to their fields and now that they have less access to lands distant from their primary houses.

Migration of both Pech and ladino populations within the Pech region also complicate the interpretation of Pech population data. Different Pech sites are reported by the various available reports. It is certain that over time some sites were abandoned by the Pech, but it is often difficult to discern whether a site which was identified as Pech in a previous report was omitted in a subsequent report because it was indeed no longer Pech or because it was unknown to the subsequent researcher or because its population was simply included as part of a larger associated center. Official censuses that did not distinguish between the Indian and ladino components of the population also provide ambiguous data because, as the ladino population of the Pech region grew and spread into formerly Pech sites, it cannot be determined what proportion of sites formerly
identified as Pech might still be Pech at the time of the census. The intermixing of Pech and ladino within settlement sites and the abandonment of some sites by the Pech is not identifiable from the published tables of the 1988 population census, which collected data on the native language of the inhabitants. These data are not sufficient for estimating the total Pech population nor the proportion of Pech within any site because they refer only to speakers of the Pech language, exclude the youngest segment of the population, and are published only at the municipio level. The language census will considered in more detail below.

Past, as well as present, efforts at enumerating the Pech no doubt also suffered from the inaccessibility of many Pech sites and the difficulty of acquiring accurate information in a census interview setting. Inaccessibility is today much less of a problem than it was previously, but still presents some obstacles to achieving an accurate count. Likewise, a face-to-face census interview does not guarantee an accurate count in this part of the world. In several of the smaller Pech villages the researcher attempted to census the entire population and found that the informants, as was also the case in matters other than population, could present significantly contradicting accounts. In one instance, in the site of Coyolito, a woman reported that 8 persons lived in her house. After leaving her house, the guide reported that 14 people actually lived there and this number was confirmed by the neighbor with whom we spoke next. In another instance, in the Pech site of Las Brisas de Pisijire, a man first reported that 16 people lived in his house. Upon revisiting this house after his brother, in another house, reported that he thought that 26 people actually lived in the first house, the first informant counted a total
of 28 inhabitants in his house. Substantially erroneous information can, therefore, be reported by the very people who should be most knowledgeable about the topic. Even censuses conducted by the Pech themselves are not immune to error. Informants in several villages related the results of recent censuses conducted by the consejos tribales of the settlements. While these are believed to be fairly accurate, and when available are usually taken as the most accurate count of a particular settlement, errors can sometimes be identified.

We will utilize a variety of sources, both official government censuses as well as independent reports and field work results, to examine past and present Pech population patterns. We shall briefly consider the data at the national and departmental levels before limiting our consideration to the municipios of Pech occupation. As mentioned above, a lack of geographic consistency and ethnic differentiation in the data complicate the issue but we shall attempt to outline the Pech population level and distribution within each municipio over the last century.

The 1988 Language Census

The 1988 census included a question on the native language of the inhabitants of the country and published the data according to the six native languages identified by the question. The native language data were published only at the department level but the Dirección General de Estadística y Censos made available data at the municipio level which allow a much greater resolution in the interpretation of the census results. The municipio level data unfortunately are not sufficient to provide either an accurate count of persons identifiable as Pech or a settlement-level resolution of Pech distribution. They
are, however, sufficient to identify several problems with the census data for ethnicity research in Honduras and therefore an evaluation of the data set should be addressed briefly.

The native language data from the census should not be relied upon as a completely accurate count of the Pech population, however. The census only reported the number of speakers of a native language that were five years old or older at the time of the census and thereby omits any children younger than five from the total count. Furthermore, because it relies upon a mid-level ethnicity identifier, the ability to speak a native language, it excludes some persons from the count who are identifiable as Pech by other ethnic characteristics. Ethnic identification is, of course, a vague and imprecise exercise and it is particularly so when outsiders attempt to assign ethnicity to others based upon the presence or absence of specific cultural traits. In the case of the Pech, almost all of the older Pech can speak Spanish and the ability to speak the Pech language has been lost among the youngest generation to the point that Pech teachers in the communities now teach Pech to their students in an attempt to preserve the language. In such a situation of ongoing cultural change it is uncertain how any particular census respondent might reply to a question regarding the native language of the members of the household. It is obvious, however, that some members of Pech families living in Pech settlements, persons who should certainly be classified ethnically as Pech, could easily be excluded from the count of Pech speakers. In known Pech municipios, then, the census count of Pech speakers should be taken as a minimal estimation of the actual
number of Pech inhabitants. In other municipios of the country, the obverse is more likely to be true.

It is unclear how Pech speakers would come to be recorded by the census in locations where they do not reside but in at least one outstanding case, and perhaps other less important ones, it seems clear that such errors were made. It is known that a few Pech do live outside of the main Pech region because informants occasionally mention relatives living outside of the four primary Pech municipios of Culmí, San Esteban, Trujillo, and Brus Laguna, for purposes of work or school attendance. The places most often mentioned include the larger cities of the country such as Tegucigalpa, San Pedro Sula, La Ceiba, or Juticalpa. The census identified a total of 32 municipios with at least one Pech-speaking resident but only 11 of those registered greater than one Pech speaker and only six municipios had greater than 10 Pech speakers recorded. Twenty-one of the total 925 Pech speakers recorded by the census, then, represented the sole Pech-speaking occupant of their municipio of residence. Of the eleven municipios registering greater than one Pech speaking resident, all except one were either one of the four main Pech municipios or were associated with a large settlement center. Among the six municipios to register greater than 10 Pech speakers, only the Distrito Central of the national capital and the municipio of Villa de San Antonio, Comayagua joined the four primary Pech municipios. The Distrito Central’s 14 recorded Pech can be accepted as reasonable, although perhaps a slight overestimation, but Villa de San Antonio’s enumerated Pech-speaking population of 243 persons is almost without a doubt an extreme error. Villa de San Antonio’s total population of 11,753 was the smallest of all
of the non-primary Pech municipios to record greater than one Pech speaker but its 243 recorded Pech speakers far outnumbered the Distrito Central's next highest Pech total of 14. Indeed, Villa de San Antonio's Pech total was the second highest, behind only San Esteban, in the entire country. In spite of this relatively high number of recorded Pech speakers in the municipio, however, Pech informants in the primary Pech municipios repeatedly denied any knowledge of Pech inhabitants there and Villa de San Antonio municipal official likewise denied the presence of Pech speakers in their municipio. It seems certain, therefore, that the recorded Pech population of Villa de San Antonio is in error and serves as an indication of problems in the collection or processing of the native language data. The Pech data reported for Villa de San Antonio will therefore be ignored in any following comparisons of Pech population data sources. It cannot be known for certain whether other significant errors were made in the handling of the Pech language data but the census data will be referred to as one indication of recent population levels. As it is, if the Villa de San Antonio data are discarded, the census correctly identifies the four primary Pech municipios as among the five municipios with the greatest numbers of Pech inhabitants and over 92 percent of all Pech enumerated outside of Villa de San Antonio were recorded in those four municipios with almost 87 percent residing in the two largest Pech municipios of Culmi and San Esteban. The actual concentration of Pech within these four and two municipios is probably even greater than that indicated by the census enumerations. The Distrito Central ranks above municipio Brus Laguna and close to municipio Trujillo because the census undercounted the Pech inhabitants of each of those primary municipios. The Pech population
of Brus Laguna increased significantly in 1990 via migration from Olancho. Further comparison of the census data with other sources will be made in following sections.

**Changes in the Pech Core in Olancho**

We shall consider the Pech population patterns of the last century within each pertinent *municipio* in following sections. Because the majority of Pech during this time frame have been found within the department of Olancho and the current presence of identifiable Pech in the departments of Colón and Gracias a Dios is primarily attributable to migrations from Olancho during this time we shall first consider the indigenous population history of Olancho before limiting our discussion to its two northeasternmost *municipios* which comprise the modern Pech core region.

The foundation of the originally Pech settlements in northeastern Olancho of Pacura, San Esteban, and Culmí has been attributed to the work of Spanish missionaries during the first two decades of the nineteenth century (Conzemius 1928: 34-35; Lunardi 1943; *Monografia* 1935). While reports of the prior establishment of other earlier, sometimes short-lived, Indian missions in Olancho are available, their exact locations and the ethnic affiliation of their Indian inhabitants is often obscure. Likewise, nineteenth and twentieth century reports of Indian inhabitants in mixed settlements or settlements originally founded as missions or reducciones in Olancho during the last century also often fail to identify the native heritage of those indigenous residents. One also suspects that the Indians mentioned in association with these older settlements, whatever their ethnic affiliation, were often already incorporated into *ladino* society and retained few native characteristics. The three Pech settlements founded early in the seventeenth
century provide an indication of the geographic extent of still unincorporated Pech at that time and the work of Subirana in Culmi and El Carbón in the 1860s provides an indication of the mission frontier just after mid-century. While the 1887 census classified the population simply as ladino or Indian, Vallejo's 1888 description of Olancho, found in the census prior to the tabulations for the department, specifically identified Culmi as a town of Pech population and referred to El Carbón by the name "la Conquista del Carbón" (1888: 193). Beyond these benchmark locations identified by the work of the missionaries and Vallejo's comments, it is currently impossible to assign with certainty an ethnic affiliation to reported nineteenth and twentieth century indigenous populations of settlements to the west.

Outside of the modern area of municipios San Esteban and Culmi, the 1887 national census recorded significant indigenous populations in municipios Catacamas, San Francisco de la Paz, Jano, and Guata. The census did not, however, specify the ethnic heritage of the recorded Indians. The authors of the Monografía del Departamento de Olancho reported significant indigenous populations in municipios Catacamas (1935: 75), Jano (1935: 91), Guata (1935: 93), Esquipulas del Norte (1935: 94), and Gualaco (1935: 111) in the early 1930s, again without identifying the ethnic heritage of the Indians. They reported at the time that the population of San Francisco de la Paz was predominantly mestizo (1935: 71). Given that Esquipulas del Norte was created from the northern part of municipio Jano in 1896 (Fiallos 1991: 304), the two reports support each other except for the case of municipio Gualaco. Although bordering municipio San Esteban to its east and municipio Guata to the west, Gualaco
recorded only 4 Indian inhabitants compared to 1,935 ladino residents in 1887. By the
1930s, however, the Monografía (1935: 111) reported that “las razas predominantes son
la india y ladina” without providing the relative proportions of each population
component.

While the authors of the Monografía were mostly consistent with the 1887
census in identifying relatively “Indian” municipios, they further made somewhat of a
distinction between the Pech municipios of Culmí and San Esteban and the rest of the
municipios for which they reported a significant Indian population component by
specifying the Pech ethnic heritage of their indigenous populations. The authors
described the town of Culmí as “el pueblo de payas” (Monografía 1935: 4) and
identified the majority of the population of municipio Culmí specifically as “La raza
paya, que habla su dialecto propio” (1935: 81). They also noted that the inhabitants of
El Carbón, in municipio San Esteban, were Paya (1935: 113). These two identifications
were the only occasions in which they specifically recognized the ethnicity of a
municipio’s Indian inhabitants. In all other descriptions of the municipios’ ethnic
composition the authors simply referred to populations classified as indígenas as being of
the “raza india” without reference to a particular indigenous heritage. Their failure to
associate the Indian populations of each of the other identified municipios with a
particular ethnic heritage while emphasizing the Pech heritage of the Indians of Culmí
and San Esteban would seem to imply a distinct difference in the identifiable cultural
characteristics between the Indian populations of the two sets of municipios as well as a
lack of contact between the Indians of the two sets. This would indicate a cultural or
social separation between the Indians of the two sets but leaves open the question of the nature of the early twentieth century Indians in northwestern Olancho in terms of their cultural heritage and their degree of assimilation. The differing treatment of the Pech and the northwestern Olancho Indians on the part of the Monografía could indicate that the two groups were of different cultural heritages but, more likely, it could also be an indication of an advanced stage of assimilation of the northwestern Indians such that their cultural heritage was uncertain even in 1930. In the latter scenario the northwestern Indians would have been heavily ladinoized and largely incorporated into ladino society, albeit probably at the lowest rungs of the societal ladder, to the point that the authors could not or would not associate them with any particular ethnic heritage. Not only did the Monografía authors fail to specify that the northwestern Indians were Pech, neither did they associate them with any other indigenous cultural tradition. For our purposes it will suffice to recognize the distinction between the identifiable Pech inhabitants of the two northeastern municipios and the populations of more ambiguous indigenous heritage in the northwest of the department as a rationale for limiting our discussions of Pech population and geographic patterns during the last century to the two municipios of the modern Pech core area, Dulce Nombre de Culmí and San Esteban. Several other pieces of evidence support the contention that, even if the reported Indian populations of northwestern Olancho were more than heavily ladinoized persons of indigenous biological heritage, they were not an integral part of the Pech society of northeastern Olancho during the decades surrounding the turn of the century.
The first corroborating evidence is provided by data from an 1895 manuscript census located in the Honduran national archives by William Davidson. The census listed settlements with indigenous populations and identified the number and ethnic heritage of the Indian residents of each settlement. All of the Olancho settlements identified as having Pech residents by this census were located in the municipios of Culmí and San Esteban. The town of Jano also appeared in the census with 38 indigenous inhabitants enumerated but without, in this case, an ethnic affiliation specified. No other settlements of northwestern Olancho were represented in the census. Davidson cautioned that the condition of the census documents as stored in the archives leaves open the possibility that what remains of the census could be incomplete. We cannot, therefore, be certain that the 1895 census reported almost no Indians in northwestern Olancho but the entry for Jano at least follows the pattern seen over 35 years later of not identifying the Indian population that is reported.

Another line of evidence for considering only the two northeastern municipios as integral to the Pech region during the last century comes from the scholarly reports of the late nineteenth and early twentieth centuries. Both Karl Sapper and Eduard Conzemius visited the Pech region then and each reported the primary Pech settlement sites from their field work and discussions with informants. Of all of the Pech sites described by these two writers, the one which was farthest west was Santa María de Tayaco near the northern section of the border between municipios San Esteban and Gualaco. Neither researcher reported Pech settlements associated with the other municipios of northwestern Olancho for which indigenous populations were reported in
1887 and the 1930s. Because each of these writers was concerned enough to provide a list of Pech settlement sites and their populations in an effort to describe the totality of the Pech region it is reasonable to assume that, even if they were unable to visit every Pech settlement individually, they would have at least heard of related settlements from their informants. Although part or all of northwestern Olancho is believed to have been occupied by the Pech during the early colonial period, the lack of any mention of Pech settlements in Olancho outside of the municipios of Culmi and San Esteban by either of these two experienced field researchers constitutes strong evidence that no other large Pech populations maintained relations with the villages of the Pech core area by the early decades of the twentieth century.

A final line of evidence for the distinctive nature of indigenous society in the northeastern municipios near the turn of the century is seen in the locations chosen for the establishment of Indian mission schools in 1915. According to information in the Monografía del Departamento de Olancho (1935 114), the government of President Francisco Bertrand organized “Misiones Escolares . . . en el territorio de la República habitado por tribus selváticas” in the departments of Olancho and Colón, which at the time encompassed the area of modern Colón and Gracias a Dios departments (see also Conzemius 1928: 15-17 and Cálix et al. 1977: 78). Three mission schools were established under this initiative, and all of them were placed in Pech and Sumu communities within or near to the municipios of San Esteban and Culmí. The Pech schools were established in the communities of El Carbón and Culmí and the Sumu school was first established in Pao, near the confluence of the Ríos Pao and Wampú in
modern *municipio* Culmí but whose location was described in the project report as “situado en territorio de la Mosquitia” (*Monografía* 1935: 115). The latter school was moved shortly after to the new settlement of Sumal near the confluence of the Ríos Wampú and Patuca in modern Gracias a Dios department. The choice of the two main Pech settlements for the establishment of two of the three mission schools further indicates the distinctive nature of the indigenous inhabitants of the northeastern *municipios* of Olancho as compared to those of indigenous heritage in the northwestern *municipios*. The nature of the reported Indian inhabitants of the northwestern Olancho *municipios* will remain uncertain but we can infer that, whatever their ethnic affiliation, they were not an integral part of Pech society and culture at the time and we will not here include them in our consideration of the recent population history of the Pech.

**The Municipio of Dulce Nombre de Culmí**

A reconstruction of the historic patterns of Pech population and settlement distribution over the last century, and particularly through the 1950s, within what is today *municipio* Culmí is facilitated somewhat by the coincidence of the *municipio* boundaries with the Pech controlled territory in this part of Olancho. Until the beginning of rapid *ladino* in-migration into *municipio* Culmí after mid-century, population figures for the *municipio* from Honduran censuses can be taken as rough estimates of the actual number its Pech inhabitants bearing in mind that each census count during the 1900s probably included at least a few *ladino* residents and some Sumo inhabitants of the far eastern reaches of the *municipio*.

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The territory of municipio Culmi was part of municipio Catacamas until shortly before the turn of the century. Although this area is believed to have been inhabited by Pech for centuries, Lunardi's account provides concrete evidence of Pech occupation from baptism records in the church archive of Catacamas. He reported that the Franciscan missionary Juaquín de Jesús Taboada y Sierra founded the mission settlement of Dulce Nombre de Jesús de Payas in 1819, probably near the modern site of Pueblo Viejo, and that it continued to be served by missionaries until the early 1830s (1943: 27-34). Pech dominance within the municipio throughout the remainder of the nineteenth century is further indicated by Subirana's selection of two parcels in the immediate vicinity of Culmi for which legal titles were acquired in 1862 and by the separation of the modern municipio of Culmi from that of Catacamas at the behest of the Pech in 1898. Subirana's reestablishment of the mission at Culmi and his desire to obtain title to the surrounding land and the nearby Flores site indicate that area surrounding Culmi was in the early 1860s a zone of significant Pech concentration within municipio Catacamas. Unlike the 1991 guarantees issued to the Pech which, because the Pech lands are now largely surrounded by ladino settlers and land claims, define a maximum area around their settlements which the Pech can exploit intensively, the 1862 titles are more appropriately seen as delimiting a minimum Pech territory. That is, the 1862 titles may have encompassed the area of greatest Pech concentration but it is unlikely that they covered all of the intensely-utilized Pech land. Both the 1895 Indian census and Conzemius' study listed sites of Pech occupation within modern municipio Culmi that lay outside of the boundaries of the 1862 titles. Municipio Culmi was created in 1898.
out of territory that formerly belonged to municipio Catacamas (Fiallos 1991: 303), with the apparent aim of providing the Pech with a territory within which they could retain some degree of political autonomy from the local ladino authorities. Conzemius reported that the municipio of Culmi was separated from Catacamas “como los Payas se quejaban continuamente de los abusos que cometieron las autoridades, decidió el Supremo Gobierno de constituirlo en municipio propio” (1928: 13). The creation of a new municipio, then, was apparently intended to separate the Pech from ladinos within an area over which they could retain control. The boundary line between municipios Catacamas and Culmi, therefore, can be taken as a good estimation of the limits of Pech-dominated and ladino-dominated lands near the turn of the century, especially along its western end. Much of the land through which its middle and eastern portions run was uninhabited. There were undoubtedly some ladino inhabitants within the western portions of the new municipio at the time of its creation as well as some Sumu inhabitants in its far eastern section along the modern border with Gracias a Dios department, but the newly formed municipio of Culmi appears to have been dominated numerically and politically by the Pech and to have remained so until after the middle of the twentieth century.

Population and Settlement to Mid-Century

The 1887 census listed nine settlements in municipio Catacamas and of those only the aldea of Culmi lies within the boundaries of modern municipio Culmi. The census reported a population of 519 for Culmi, of which 23 were classified as ladinos and 496 as indígenas. No distinction is made in the census between Pech and Sumu
inhabitants so it is impossible to say how many of the indígenas recorded may have been Sumu and not Pech on the basis of the population counts alone. Neither did the census provide enumerations for the various caseríos of aldea Culmí. It is not possible, therefore, to assign ethnicity according to the dominant Indian group of each caserío nor, even, to know whether the more distant Sumu settlements were included in the total count.

Archived documents from the 1895 Indian census of Honduras reviewed by Davidson listed seven settlements within the boundaries of modern municipio Culmí that had a total population of 421 persons, only about four-fifths of that recorded in 1887. Five of the seven settlements, Aguaquire, Pacuyo, Punta de Piedra, Río Largo, and Belém, recorded Paya populations totaling to 289 persons while Dulce Nombre’s population of 73 persons was identified as Paya, indio, and Spanish, and Paon’s 59 recorded inhabitants were classified as Sumo/Sambo. If the number of ladinos is assumed to have remained constant since the 1887 census, the remaining fifty inhabitants of Culmí can be assumed to have been classified as Paya which would yield a total of 339 Pech in the seven enumerated settlements. This gross estimation of the Pech population in 1895 plus the 59 recorded Sumu yields a total of 398, which falls far short of the 496 indígenas recorded in the 1887 census.

Shortly after the 1895 census, Sapper (1899) reported a Pech population of 385 for Culmí (see also Conzemius 1928: 10). Sapper noted that some ladinos, in addition to about 60 Pech men, were present at a Sunday meeting held to elect political leaders but he did not estimate their number at the meeting nor within the municipio. The three
sources provide Pech population estimates for municipio Culmí near the end of the century of about 437 in 1887, 339 in 1895, and 385 in 1898.

Eduard Conzemius (1928: 13) counted only around 300 Pech in the vicinity of Culmí in 1919. He further reported that the most recent national census, which he specified had been taken in 1916, had recorded 450 inhabitants in the municipio, 90 of which were identified as ladino or Sumu. This produces, of course, a total of 360 Pech in the municipio at the time of the census. The total population figure does not agree, however, with the population of 331 reported for municipio Culmí in 1916 by census data both published at the time and included in the Dirección General de Estadística y Censos' 1981 compendium of its national censuses (DGEC 1981: 78). A total population in the municipio of 450 does agree well with the figure of 459 reported by the most recent, 1926, census at the time of the publication of Conzemius' work (DGEC 1981: 89), although this was ten years after the date for which Conzemius reported.

After the 1926 census, the reported population for municipio Culmí fell to 325 in the 1930 census and it wasn't until the 1950 census that the municipio again recorded a population of greater than 400 persons. It is unclear, therefore, whether Conzemius was mistaken in his specification of the date of the census which counted 450 residents in the municipio or if there was some other source for this confusion. Like Conzemius, the report on the 1914-1915 mission schools included in the appendix to the Monografía del Departamento de Olancho reported the population of Culmí to be 450 persons and the town to be composed of “una iglesia, un cabildo y como 30 casas” (1935: 115). The census of 1916 itself reported a population of only 331 persons for the municipio in the
settlements of Dulce Nombre, Aguaquire, La Danta, Punta de Piedra, Vallecito, Pueblo Viejo, and Agua Blanca. It did not, therefore, include any Sumu settlements on or near the lower Río Wampú and this omission may partially account for the discrepancy in population totals reported by the census and Conzemius and school officials.

Conzemius listed what he termed the “principales caserios” of municipio Culmi as Aguaquire, La Danta, Pueblo Viejo, El Marañón, Vallecito, Pisijire, La Colonia, Pavo, Pedernales, Belén and Punto Piedra (1928: 13). He proceeded to mention as part of the municipio caserio Agua Blanca, which he described as two “ranchos de ganado con pastos” whose owners he specified were from Catacamas, and therefore most likely were ladinos (1928: 13). Conzemius also reported the presence of two caserios of Sumus in the municipio, Pautar Busna and El Sumal, which were located along the lower Río Wampú and were separated from the settlement of Culmi by a journey of four days travel, mostly through “una región que sólo fieras habitan” (1928: 7, 13-15). The approximate location of each of the caserios mentioned by Conzemius can be established from maps or other reports with the exception of caserio Pavo. Pech informants from municipio Culmi were not aware of any sites known as Pavo but suggested that it could have been the former site of Pech occupation known as Pucuyo or Paulaya on the upper Río Paulaya, which the Pech call the Río Paó, not to be confused with the Río Pao which is a tributary of the Río Wampú and near the mouth of which was formerly the Sumu settlement of Pao. The site known as Pucuyo, near today’s aldea Paulaya, was reported to be the site of a single Pech house by Helbig in 1953 (1965: 235) and to have been inhabited by Pech in earlier decades of this century, as early as 1914, by Pech informants.
The 1895 Indian census recorded 53 Paya at the site of Pacuyo and 59 Sumu and Sambo at the site of Paon. Conzemius did not include a caserío Pacuyo, Paulaya, or Paó nor the Sumu caserío Pao in his report. He did, however, specify only the caseríos of Pautar Busna and El Sumal as sites of Sumu occupation within municipio Culmí while including caserío Pavo among his principal caseríos, which can be taken to have been dominated by Pech at the time. The Sumu caserío Pao was in 1915 the initial locus of one of the three Misiones Escolares established for the tribus selváticas of Olancho and Colón, but the school was moved in 1916 to the new Sumu reduction of El Sumal (Monografía 1935: 113-116; Martínez Landero 1935: 34, 35). Thus, although the Monografía del Departamento de Olancho’s appendix on the mission schools included descriptions of the locations of Pao, Pautarbusná, and Sumal from 1915 and 1916, Conzemius reported only the existence of Pautar Busna and El Sumal from his work in 1919 and Martínez Landero, the school teacher assigned to El Sumal in 1916-17, likewise showed only Pautarbusna and Sumal as Sumu settlements on the Río Wampú, in addition to other sites on the Río Patuca, on his sketch map of the region (Martínez Landero 1935: 37). The mission schools were closed for lack of money to pay the teacher’s salaries in 1919 (Conzemius 1928: 17), however, and by the early 1930s the Monografía del Departamento de Olancho (1935: 20) again reported Pao as an aldea of municipio Culmí while neither Pautar Busna nor El Sumal appeared in its list of settlements. The Monografía also included Pavo among the municipio’s settlements, however, providing further evidence that Pavo was distinct from the Sumu caserío of Pao and supporting the proposal that Pavo could have been a corruption of Paó indicating a settlement in the
area of Paulaya and Pucuyo. Maps in this work, therefore, place Pavo at the site of the
current ladino aldea of Paulaya.

It should be noted that some Pech informants did suggest that the reported
caserío Pavo might have represented caserío Pao on the Río Pao. Only one informant,
however, reported that Pech had actually lived on the Río Pao during the early years of
this century. This informant had been told by a worker from the Consejo Asesor
Hondureño para el Desarrollo de las Etnías Autóctonas (CAHDEA) that the government
had sent a teacher to a Pech community on Río Pao in 1915. Information regarding the
establishment of the mission schools from the Monografía del Departamento de
Olancho, Martínez Landero, and the Estudio Socio Económico y Cultural, however,
makes it clear that only three schools were established under the program and that the
school at Pao served a Sumu population. No other indications of a Pech presence on
Río Pao early in this century have been found and, since the Monografía lists both Pavo
and Pao as settlements of municipio Culmi in the early 1930s, it seems clear that Pavo
was not the same as caserío Pao on the Río Pao.

The 1887 census, the Indian census of 1895 and Sapper's report from 1898 all
provided some indication that, while it was predominately occupied by Pech, there were
non-Pech inhabitants within the area of modern municipio Culmi. Conzemius likewise
noted that two of the twenty-five houses in Culmi itself were inhabited by ladinos and he
clearly specified that the two caseríos on the lower Río Wampú were occupied by
Sumus. He also noted that Agua Blanca, which lies on the border between municipios
Catacamas and Culmi, was owned by people from Catacamas and, in his description of
the route from El Payal on the lower Río Paulaya to Culmí, that caserío La Colonia was the site of "una pequeña hacienda de ganado y dos ranchos de indios payas" (1928: 12, 18). While he did not specify that the owners of the La Colonia hacienda were ladinos, his use of the term hacienda and his contrast of it with the Pech-occupied ranchos indicates that the hacendados were ladino and not Pech. Conzemius' work, therefore, provides a description of the ethnic distribution within the territory of municipio Culmí consisting of a few Sumu settlements on its far eastern edge that were separated from the majority of the Pech- and ladino-occupied settlements in the western part of the municipio by a large swath of uninhabited territory. He provided some indication of ladino occupation in only three of the thirteen settlement sites which he mentioned in the western part of the municipio and, based upon his descriptions, with the possible exception of caserío Agua Blanca on the Culmí-Catacamas border, all of the western settlements appear to have been numerically dominated by Pech inhabitants. Conzemius did not, however, provide a detailed description of the ethnic composition of any of his reported settlements except for his household level description of Culmí itself and it is entirely possible that ladinos inhabited other sites in the municipio than the three for which he provided some such indication. Comparison with other sources, as well as Conzemius' own qualification of his listing as comprising the principal sites of the municipio, also indicate that his report may not have mentioned every settlement site in the municipio. The site of Río Largo, for example, was mentioned by informants as a site of former Pech occupation and was reported in the Monografía del Departamento de Olancho as a caserío of the municipio in the early 1930s. Río Largo was also
included in the 1895 Indian census as a site then occupied by 60 Paya, although this document gave its location as Mosquitia. Still, Conzemius' report provides the most complete description of municipio Culmi's settlement pattern available for the early decades of this century and its general depiction of Sumu occupation in the far eastern part of the municipio, a large uninhabited central zone, and a western zone of greater settlement density which was heavily dominated by ethnic Pech inhabitants is not substantially contradicted by other sources.

The Monografía del Departamento de Olancho provided a list of settlement sites within municipio Culmi in the early 1930s which was substantially the same as that of Conzemius from 1919. In addition to the cabecera of Culmi itself, the Monografía (1935: 20) reported the aldeas of “Pueblo [sic], Aguaquire, Vallecito, Belén, Marañón, Punta Piedra, La Danta, Pavo, y Pao” and the caseríos of “Vallecito, Río Largo, Pedernales, Pisigire and Agua Blanca” within the municipio. The Monografía’s list did not include La Colonia from Conzemius’ list while it did report the two settlements of Río Largo and Pao which were not among those listed by Conzemius. Both of these sites were reported to have around 60 inhabitants by the 1895 census documents, however, so it would appear that they were not recently established settlements in the 1930s. This work reported a total population for the municipio of 325 in 1930 and 355 in 1933 (1935: 24-25) and stated that the Pech were its dominant ethnic group (1935: 81). It did not estimate the number or relative proportion of the population that was ladino but it did note that about four ladino families lived in Culmi at the time.
Although *caserio* Pao was included among the settlements of the *municipio*, no mention was made of Sumu inhabitants in the section devoted to the description of the *municipio*.

Lunardi's publication on the Paya in 1943 did not attempt to list all of the settlement sites of the *municipio* but it did describe the history and general location of a few sites and also argued that there was a *ladino*, and even African heritage, presence in the area of Culmí as far back as the early 1800s. Lunardi reported that 366 Pech inhabited *municipio* Culmí in 1943 (1943: 35). This figure represents practically the entire population of the *municipio* as reported by the national government at the time. The national census of 1940 had reported a population of 362 persons for *municipio* Culmí and the total had grown to 382 by the time of the 1945 census. Nevertheless, from his visit to Culmí in June of 1943 Lunardi reported at least some *ladino* presence in the vicinity of Culmí. He did not describe the ethnic makeup of Culmí itself in detail, noting only that it was occupied by both Pech and *ladinos* and that the Pech typically did not live in the town but in the surrounding territory where they had subsistence plots (1943: 34-35). He reported more specifically, however, the presence of three houses of *ladinos* near the neighboring sites of Pueblo Viejo and Belén and “a una legua de distancia se encuentran *viviendas de Payas*, y a un cuarto de legua, *viviendas de Payas y ladinos*” (1943: 35). Unfortunately, Lunardi did not specify the names of the two settlement sites beyond Pueblo Viejo.

While this reference was the only concrete indication of a non-Pech population in the *municipio* in 1943, Lunardi did present evidence from baptismal records from the early 1800s to argue that some non-Pech inhabitants had resided in the area for many
years prior to the time of his writing. He reported that baptismal records for Culmi from the years 1819 to 1831 registered non-Paya baptisms in a section separate from the Pech baptisms (1943: 30). Over the 13 year period covered by the records, some 32 non-Pech baptisms were recorded, the first of which was a son born to “Mulatos libres” on the second of February, 1819 (1943: 31, 37). From 1819 to 1829, 45 Pech adult and child baptisms were recorded, but it is unlikely, however, that this figure represented the majority of the Pech population in the entire area surrounding Culmi (1943: 38). Indeed, Padre Subirana reported the baptism of some 700 Pech in Olancho in 1857, a number that corresponds closely to the indigenous populations of El Carbón and Culmi enumerated in the 1887 census (Davidson 1984: 448, Lunardi 1943: 26).

Throughout his work, in addition to the two unnamed sites mentioned above, Lunardi specifically identified only the sites of Culmi, Pueblo Viejo, Belén, and “el Culaco o Tzulaco” (1943: 36) within the municipio. Although he noted that the Pech “tienen sus trabajos y sus viviendas en la selva” (1943: 35), he did not supply the names or locations of other settlement sites in existence at the time. His mention of the site now known as Culuco, near where the old trail from Culmi to the Sumu settlements of the lower Río Wampú and Río Patuca crossed the Río Wampú, did not specify the ethnicity of the inhabitants nor, in fact, did it explicitly state that the site was inhabited at all. Lunardi mentioned only that the transportation route passed by the site. He did not, however, refer to this portion of the route as following the Río Culuco, as Conzemius had earlier (1928: 15). Rather, Lunardi stated that the route passed “por el Culaco o Tzulaco” which implies a specific settlement site. Such implication provides the earliest
indication of Culuco's presence as a settlement site among the reports here considered although Pech informants reported that the site was occupied at least as early as the first or second decade of this century and the list of Pech birth dates and places included in Pueblo Nuevo Subirana's title petition to the Instituto Nacional Agrario (INA solicitud 15872) reported a birth in Culuco in 1920.

On his 1953 journey of geographic exploration through eastern Honduras, Karl Helbig visited the Pech region of Olancho and what was then the eastern portions of the Department of Colón or, more commonly, La Mosquitia, as well as other parts of eastern and southern Honduras. He reported that the total Pech population of Honduras had by then fallen to some 400 persons, but did not estimate how many of those resided in municipio Culmí (1965: 235). He did state, however, that one-half or more of the remaining Pech lived in the primary settlements of Culmí and El Carbón and placed the Pech population of El Carbón at 100 persons (1965: 79, 235). This would indicate an estimate of 100 or more Pech residents at Culmí, a settlement which Helbig described as then consisting of 25 houses, a church, a school, and an alcaldía, and as inhabited by both Pech and ladino residents (1965: 66). Helbig's estimates of some 30 Pech on the lower Río Paulaya and 40 along the lower Río Plátano combine with the 200 estimated inhabitants of the two main Olancho settlements, then, to imply a remaining total of only 130 Pech then living in isolated houses along the Río Grande in municipio San Esteban and in the outlying settlements of municipio Culmí. The maximum resulting estimated Pech population for municipio Culmí of about 230 persons was probably an underestimation, however, considering the 1950 census' report of 794 total inhabitants
in the municipio at a time before the ladino component of its population is believed to have achieved majority status (DGEC 1981: 174). In addition to the cabecera, Helbig reported that four aldeas, Aguaquire, Pueblo Viejo, Pisijire and La Danta as well as some smaller caseríos, were then located within the municipio but he did not provide specific population figures for any of these settlements. He did note, however, that seven Pech houses were located at La Danta, two at Marañones, and one at Pucuyo and these three sites were described as being inhabited by “pequeños grupos de payas” with no mention of ladino occupation (1965: 67 errata, 235). In addition to the Ladino inhabitants in the cabecera of Culmí, Helbig also reported at least a partial ladino occupation of Pueblo Viejo at the time. Whether he intended to report that Pueblo Viejo was entirely or only partially inhabited by ladinos, however, is uncertain. He stated that “Al N. de Culmí, a lo largo del Camino Real que conduce al Valle del Paulaya, solo existen unos cuantos caseríos ocupados en parte por ladinos, como el de Pueblo Viejo, estando otros ocupados por pequeños grupos de payas. . . .” (1965: 67 errata). His statement leaves in doubt whether his intent was to indicate that some of the caseríos north of Culmí were inhabited entirely by ladinos or whether some of the caseríos were partially occupied by ladinos in addition to Pech and it is therefore uncertain whether Helbig intended to report that Pueblo Viejo was at the time inhabited solely or partially by ladinos. Other evidence, however, indicates that the site retained at least some Pech occupants during and after the time of Helbig’s visit. Beyond his representation of La Danta, Marañones, and Pucuyo as exclusively Pech-occupied sites and Pueblo Viejo as a site at least partially occupied by ladinos, Helbig did not comment on the ethnic
composition of the *aldeas* of Pisijire and Aguaquire. From his failure to include Pisijire and Aguaquire among the explicitly identified sites of Pech occupation it could be inferred that these *aldeas* were then occupied solely by *ladinos* but the other available evidence, such as oral histories, birth records, and the history of *ladino* in-migration into the *municipio* argue against such an inference. According to his route of travel maps, Helbig apparently did not visit these *aldeas*, as he had the sites for which he provided more detailed information, and their omission as sites of Pech occupation was, therefore, probably the result of a lack of information on his part. Helbig also failed to even mention other Pech sites that have been reported to have been in existence at the time, such as Agua Zarca, Culuco, and Vallecito. It is not surprising, therefore, that he would have lacked specific information concerning the populations of Pisijire and Aguaquire. Helbig mentioned only two other settlement sites in the vicinity of Culmi and both of these appear to have been abandoned in 1953. La Colonia was the former site of a sawmill, which Helbig reported had ceased operations prior to 1950 and Agua Blanca was the site of a former cattle ranch which had been abandoned by 1953 because of a scourge of jaguars and vampire bats (1965: 67).

**Population and Settlement after 1953**

During the second half of the century the *ladino* presence in *municipio* Culmi increased dramatically, largely through rising in-migration after the construction of a road from Catacamas to the *cabecera*, a fact which is vividly illustrated in the *municipio*’s population graph (Figure 41). The changing composition of *municipio* Culmi’s population, from majority Pech to majority *ladino*, also brought about a change
Municipio Culmi Population History

Figure 41. Population history of municipio Culmi.
in its ethnic distribution. As ladinos moved into or near the already established settlement sites, the Pech abandoned some sites and concentrated in others. The major change was probably the abandonment of Culmí itself. Although the cabecera had often been reported by previous authors to have been occupied only intermittently by the Pech, that is only one or two days per week, the majority of the houses and land within the settlement had for years been owned by the Pech. As greater numbers of ladinos arrived in the cabecera, the Pech sold or abandoned their properties there and remained permanently in the outlying caseríos that had previously been the sites of their subsistence plots. As was the case in the cabecera, some of the outlying aldeas and caseríos that had long been occupied by the Pech were also abandoned to the ladinos as their Pech occupants moved to other Pech-occupied sites.

Their retreat from the increasing ladino presence appears to have resulted in a concentration of the Pech in fewer, probably larger, sites with less total land available for exploitation, obviously, as ladinos laid claim to the municipio's lands for their own use. These changes in the Pech distribution within municipio Culmí did not, however, serve to concentrate the Pech into a single, smaller, contiguous core area, as was the case near El Carbón in municipio San Esteban during the latter decades of the century. Rather, because ladinos occupied Culmí itself, which had been a focal point of the Pech population in the municipio, the Pech were forced to withdraw and disperse outward from the population center instead of retreating and collapsing inward to concentrate around the town. As Culmí's former occupants established permanent residence on their subsistence lands the core of what was formerly a predominantly Pech population region
was dissolved and, as ladinos claimed or occupied other parcels of the outlying lands. the Pech as a group were left with a fragmented territory wherein parcels occupied and controlled by the Pech were separated by intervening ladino lands. Rather than a loss of territory from the contraction of a contiguous region before an advancing ladino front or fronts, then, the Pech of municipio Culmí have experienced a territorial reduction via the fragmentation of the formerly predominantly Pech territory in the western and central parts of the municipio. Whereas the municipio, particularly its western and central sections, is properly conceived of as having been a Pech region with some ladino enclaves during the first half of the century, by the latter part of the century the reverse holds true. The bulk of the municipio is now a predominantly ladino region containing several remaining Pech enclaves. Pech populations are still distributed throughout much of the area of the municipio which they were reported to have inhabited by Conzemius in 1919 and by the 1895 Indian census, but the area is no longer a contiguous, predominantly Pech region. The lands available to the Pech communities for subsistence exploitation have been reduced to discreet parcels separated from other Pech lands by intervening ladino settlements and land claims.

During the second half of this century the loss of Pech control over the political structures of the municipio and the improved access to the municipio provided by the opening of a road from Catacamas have been primary factors influencing the changing ethnic composition of the municipio's population. The Pech abandonment of the town of Culmí and the establishment of Pueblo Nuevo Subirana near the old Pech site of Marañónes as a new focus of settlement for the Pech of municipio Culmí have been
dominant processes affecting the changing pattern of Pech distribution within the municipio.

A determination of municipio Culmí's Pech population levels and distribution between the time of Helbig's 1953 report and that of Jesús Lanza et al. for 1985 is complicated by both the lack of complete reports and the rapid changes occurring within the municipio during that period. An estimation of the situation at the time of the 1974 census can be made, however, by combining the data available from the census, various reports and field work. Knowledge of the current distribution of the Pech within municipio Culmí provides a beginning assumption from which to estimate the Pech-occupied sites of 1974. Population data at the caserío level can then be obtained from unpublished census documents at the Dirección General de Estadística y Censos. Data provided by Pech informants and various documents and reports must also be considered, however, to help assure that the currently occupied sites were indeed occupied by the Pech in 1974, to identify the possibility of other sites then occupied by the Pech, and to evaluate the accuracy of the census enumerations for particular Pech settlements.

The first scholarly report available on the region after that of Helbig is Pierleone Massajoli's article, "Los Payas." Because Massajoli's 1970 report on the Pech, which mentioned only the settlement of Culmí within municipio Culmí, was published only four years before the national census of 1974, it is clear that the situation which he described was not up to date. He reported that Culmí was one of only four Pech-occupied sites in Honduras, the others being Santa María del Carbón, El Payal, and Pushkira, and that
many of the other former Pech caseríos had disappeared (1970: 69). Culmí was described as containing about ten houses, a church, and no more than 300 Pech residents. Massajoli also stated that some Sumu residents lived in Culmí but he did not mention any ladino presence in the town. His description does not match that provided for Culmí by the 1974 census and other reports relating to the early 1970s. Each of the sources reviewed thus far provided evidence of the existence of other settlements in the municipio and, by 1974, municipio Culmí contained 12 aldeas and 80 caseríos. The 1974 census recorded 277 houses in the cabecera of Culmí and the majority of the 1,297 inhabitants enumerated would by that time have been ladinos as the Pech were by then in the process of abandoning the cabecera for some of the very outlying sites Massajoli seems to have claimed to have disappeared.

The Pech of municipio Culmí today comprise six communities or tribes associated with their remaining significant settlement sites. The remaining Pech communities are Agua Zarca, Culuco, Jocomico, Pisijire, Pueblo Nuevo Subirana, and Vallecito. Agua Zarca, Nuevo Subirana and Vallecito each have nearby associated, permanently Pech occupied caseríos or barrios while the Pech of Culuco utilize several distant, intermittently occupied sites for subsistence production. The associated Pech sites of communities Agua Zarca, Jocomico, Nuevo Subirana, and Vallecito are almost entirely inhabited by persons of Pech heritage while that of Pisijire is a distinct barrio known as Las Brisas composed of four houses on the outskirts of the now predominantly ladino settlement of San Pedro de Pisijire. Community Culuco is inhabited by persons of Pech, ladino, and Sumu heritage. One Culuco informant even indicated that his father
was from the western Honduras town of Marcala and may have had been partly Lenca in heritage. Only one Pech-occupied house remains in the town of Culmi itself. The communities of Agua Zarca, Jocomico, Nuevo Subirana, and Vallecito were each awarded provisional guarantees to lands surrounding or near their settlements by Instituto Nacional Agrario in August of 1991.

Several sources identified important concentrations of Pech within municipio Culmi during the middle and late 1970s. These reports, combined with settlement history data provided by Pech informants and Pech birth data contained in both the Instituto Nacional Agrario land title petition for Pueblo Nuevo Subirana (INA solicitud 15872) and Pueblo Nuevo Subirana’s own 1990 census, allow the identification of sites of Pech occupation around the time of the 1974 census, from which a rough estimation of the Pech population at the time can be made. Holt’s progress report to the Instituto Hondureño de Antropologia e Historia on his linguistic research among the Pech in 1974, which was studied by Davidson, reported populations of approximately 150 Pech in sixteen houses each at the sites of Pueblo Nuevo Subirana and Vallecito from his visits to these two sites in February of 1974. The report also related informants’ reports of one house with four Pech residents remaining in Culmi, fifteen to twenty Pech in two houses in Pisijire, five houses of Pech in Agua Zarca, four houses in La Danta, two houses in Jocomico, and four families of Pech in Aguaquire. Some question remains, however, as to whether his informants’ information was accurate concerning a Pech occupation at the time in the sites of La Danta and Aguaquire. A census of Pech individuals conducted by Pech leaders in 1976 which is located in the library of the
Instituto Hondureño de Antropología e Historia included population counts for the communities of Pueblo Nuevo Subirana, Pisijire, Jocomico, and Vallecito. This census reported Pech populations of 221 for Nuevo Subirana, 37 for Pisijire, 30 for Jocomico, and 120 for Vallecito. The Pech census did not, however, include counts for the Pech populations known to exist at the time in Culuco and Agua Zarca and its associated caseríos of La Campana, Coyolito, and Zopilote. A socio-economic and cultural study of three Pech settlements conducted and published in 1977 by the Secretaría de Cultura, Turismo, e Información of Honduras included Pueblo Nuevo Subirana in municipio Culmí among the sites studied. It reported a population of 282 persons comprising 45 families in 28 houses at the time for Pueblo Nuevo Subirana (Cálix et al. 1977: 37). The study did not include detailed data for any other Pech settlement in this municipio but did identify four other Pech-occupied caseríos and the number of Pech families living in each. At that time seven Pech families were reported to inhabit caserío Agua Zarca, four families lived in Pisijire, one in Jocomico, and four in La Danta. The final report from the 1970s was that of Bertrand Soto in 1979. Bertrand Soto credited Leonardo Carasco, who conducted the 1976 Pech census for the settlement of Subirana, as the source for his population data. It is not surprising, therefore, that his data correspond closely, albeit with some increase, with those of the 1976 census with the exception that four additional sites were reported. In addition to the sites of Subirana, Jocomico, Pisijire, and Vallecito which were counted by the 1976 census, Bertrand Soto reported populations of 60 Pech in Agua Zarca, 119 in Aguaquire, and a total of 52 in the two sites of Culuco and La Danta (1979: 35-36). As noted in the case of Holt’s 1974 report,
the 1977 and 1979 reports of Pech populations still residing in La Danta and Aguaquire are suspect. Nevertheless, the Pech population of municipio Culmi as reported by Bertrand Soto totaled to 681 individuals.

The four sources present a total of eight sites of Pech occupation within municipio Culmi during the 1970s. Six of these sites are still the focus of Pech communities today while two, Aguaquire and La Danta, no longer contain Pech inhabitants. In spite of these reports, however, it is uncertain whether the Pech continued to occupy Aguaquire and La Danta during the latter 1970s. The reports of Holt, Cálix et al., and Bertrand Soto each reported, on the basis of information provided by Pech informants rather than actual site visits, that both of these sites contained Pech inhabitants at the respective times of research. Holt reported the presence of four Pech families in both Aguaquire and La Danta, Cálix et al. reported that four Pech families inhabited La Danta but not mention any Pech occupation in Aguaquire, and Bertrand Soto specified a Pech population of 119 persons in Aguaquire and 52 persons in the combined sites of Culuco and La Danta. Informants consistently reported to this researcher, however, that the Pech had abandoned both of these sites by at least the middle of the decade and probably before the time of the national census of 1974. According to this researcher’s informants, among the five reported Pech-occupied sites in the three reports, only Holt’s report of four Pech families residing in La Danta in early 1974 is even plausible.

Assuming, however, that each of the settlement sites recorded in the various reports reviewed above were at one time occupied entirely or predominantly by Pech, an

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assumption that is almost certain through the time of the *Monografía del Departamento de Olancho*’s 1930s listing and very probable through Helbig’s 1953 report, the published reports combine with reports from Pech informants and Pech birth data found in Pueblo Nuevo Subirana’s Instituto Nacional Agrario title petition to provide a total of some 21 sites in municipio Culmi for which some date of occupation can be established from 1887 through the middle of this century. By 1985, only eleven sites of Pech occupation could be identified and three of those were *caseríos* then associated with the older Pech settlements of Agua Zarca and Vallecito which were likely sites of former Pech occupation or agricultural fields but for which earlier concrete evidence of occupation is not available. It is also possible that other sites in the municipio, such as Las Flores, which was included in the 1862 land titles obtained by Padre Subirana and whose inhabitants were reported to have moved to La Danta at some time in the past but for which no approximate date could be given, were occupied or utilized by the Pech during the early twentieth century even though relatively concrete evidence for such occupation or utilization is lacking. The date of Pech abandonment of any particular site is, however, somewhat uncertain as the various published sources, as has been seen in those thus far reviewed, often disagree as to the sites occupied at the time of writing and informants’ accounts and the available Pech birth data add to the magnitude of conflicting data. Not every informant’s report was in complete agreement with other informants’ reports nor with the published reports and birth data concerning the former Pech occupation of certain sites. Further complicating a reconstruction of the settlement history in the municipio are the former Pech practices of maintaining a house in the
cabecera of Culmí as well as one in an outlying caserío and of having agricultural fields in more than one caserío. These practices continue today but the primary residence of the Pech farmers now lie in the outlying settlements of the municipio rather than the cabecera.

Oral histories collected from Pech informants and birth data from Pueblo Nuevo Subirana’s INA petition provide both confirmation that the Pech did at one time inhabit each of the sites reported by the earlier published reports, with the qualified exceptions of Pavo and Pedernales, and indications, albeit with some contradictions, of when the Pech abandoned some of the sites. No informants could confirm that Pech had previously occupied the sites of Pavo, which was reported by Conzemius and the Monografia, and Pedernales, which was included in Perry’s settlement listing as well as in those of Conzemius and the Monografia. Pavo is here assumed to be the old Pech site of Pucuyo, now the aldea of Paulaya, which was reported in the 1895 census, Perry’s 1899 listing, and Helbig’s 1953 work. Pucuyo was not reported as a settlement site by the two works which listed Pavo among municipio Culmí’s settlements but its occupation during the times of those publications is indicated by its inclusion in publications before and after those of Conzemius and the Monografia as well as by a Pueblo Nuevo Subirana informant’s report of his birth in Pucuyo in 1914 and the listing of a Pech birth there in 1958 in the INA title petition. Neither could most informants confirm that the Pech, nor anyone else, had once occupied a site called Pedernales even though a settlement by that name was reported by Perry, Conzemius, and the Monografia. Only one Pech informant, a resident of Pisijire, even implied knowledge of
a former Pech occupation at Pedernales. When asked about the site, he replied only that he did not know in what year the Pech had left Pedernales. Pech informants from the community of Agua Zarca associated the site of Pedernales with Quebrada del Pedernal, a small tributary flowing into the Río Aguaquire from the south near modern aldea Las Flores, and could not remember any former inhabitants, either Pech or ladino, along that stream. The site of Pedernales shown on maps from the Instituto Geográfico Nacional and the Dirección General de Estadística y Censos, however, lies to the north of Río Aguaquire near another of its tributaries, the Quebrada del Guajiniquil and one to two kilometers northwest of Las Flores. Although lands surrounding Las Flores were titled to the Pech through the efforts of Padre Subirana in 1862, no report of settlement at Las Flores was reported by any of the published sources here considered until the 1974 census, by which time the enumerated population of 56 persons was apparently entirely ladino. The cacique of community Agua Zarca, who was born in 1922, reported that one or two houses of Pech had occupied Las Flores in years past but had moved to La Danta at an unspecified date. The relatively close proximity of Las Flores and Pedernales raises the possibility that a site of Pech occupation existed in their vicinity which was referred to as Las Flores at the time of the 1862 land titles but as Pedernales in the published reports of the early 1900s and by the Pech informant from Pisijire and again as Las Flores by the cacique of Agua Zarca. Both place names appeared in the 1974 census, at which time caserio Pedernales recorded a population of 21 persons, but only aldea Las Flores recorded any inhabitants, 92, in the 1988 census. All of the persons enumerated at these two sites during both censuses, however, were very likely
ladinos. The movement of Pech from Las Flores/Pedernales to La Danta would have occurred at least prior to the Pech abandonment of La Danta in the early 1970s and probably long before that. No Pech births were recorded for either site in the INA petition and no informant reported ever having lived at either site to provide a chronological indicator of Pech occupation in the area beyond what is available in the published reports. Neither could the two informants that did mention Pedernales or Las Flores recall the time at which the Pech left this area. Given, then, Helbig’s failure to mention this previously reported site in 1953, the lack of first person accounts of birth or residence there, and the general lack of knowledge concerning the site on the part of informants, it seems entirely possible that the site was abandoned between 1930 and 1953, as indicated by the published reports. It further seems unlikely that a site of relatively recent Pech occupation would have been forgotten in the less than twenty years since the 1974 census and it can therefore be assumed with some certainty that the enumerated population of the two sites in the 1974 census was already at that time composed of ladinos. It would also appear, then, that the settlement of Pedernales, which was reported to exist three times from 1899 to 1935, during which time the municipio’s population was overwhelmingly Pech, has been largely forgotten by the Pech of the 1990s as a site of former Pech occupation.

Besides confirming the former Pech occupation of most of the sites reported in the various publications prior to the 1974 census, informants’ accounts and birth data also identified several sites of Pech occupation within municipio Culmí during this century that were not reported by the earlier published reports and, in some cases, that
have not been reported as former Pech sites at all. Prior to reports of the 1970s and 1980s, no Pech nor ladino occupation had been reported for the sites of Agua Zarca, Jocomico, Las Minas, Pisijire Arriba, or Pozo Hondo yet Pech informants reported that each of these sites was inhabited by Pech prior to the initiation of rapid ladino immigration in the 1960s. Birth data from the INA land title petition recorded births as early as 1939 in Agua Zarca, 1961 in Jocomico, and 1971 in Pisijire Arriba while individual informants reported their own births in 1922 in Agua Zarca, 1927 in Jocomico, 1931 in Las Minas, 1937 in Pisijire Arriba. The Pech occupants of Pozo Hondo, whose house site was one to two kilometers down stream on Quebrada Pozo Hondo from the current site of caserio Pozo Hondo, reportedly moved to Vallecito in 1964 when the family head was 51 years old. It was not specified that this individual was born in Pozo Hondo, however, only that the site had been occupied for some time and that the family left there in 1964. Informants also reported that the sites of Wampusito, Zopilote and Culuco were inhabited before mid-century although each of these sites was previously reported only once. Wampusito and Zopilote were included in Perry’s 1899 list of settlements and Culuco was mentioned as a place in 1943 by Lunardi (Perry 1899: 293, 299; Lunardi 1943: 36). Conzemius also mentioned the Río Culuco among the streams of municipio Culmí and noted that a portion of the trail from Culmí to the mouth of the Río Wampú followed its course but he did not identify any settlement site on the river (1928: 14, 15). Pech informants reported that each of these sites was inhabited by Pech during the early decades of this century and confirmation of
these reports is found in the INA petition birth data which showed a birth in Zopilote in 1946, in Culuco in 1920, and Wampusito in 1938.

Of the twenty-one sites of Pech occupation during the first half of the century which have been identified from published sources, birth records, and informants’ accounts, only seven, Agua Zarca, Zopilote, Culuco, Jocomico, Pisijire, Subirana, and Vallecito, retained significant Pech populations by 1992 (Figure 42). Three other sites, La Campana and Coyolito, which, like caserío Zopilote, are considered part of community Agua Zarca, and El Naranjo, which is considered part of community Vallecito, are also currently occupied by the Pech. It is uncertain whether these three sites were occupied by Pech inhabitants during the first half of the century although, given their proximity to current and former Pech settlements, it is certainly possible that they were occupied, or at least utilized, by Pech during that time in spite of the lack of reliable evidence to support the contention. The exact date of Pech abandonment of the remaining fourteen former Pech sites is impossible to determine given the sporadic and incomplete nature of the published reports on the municipio and the conflicting accounts provided by various informants. It is possible, however, to estimate approximate dates, or ranges of dates, at which the various sites were abandoned from the available sources. It must be emphasized, however, that any dates arrived at from these sources are only estimations whose accuracy is subject, primarily, to the limitations of the memory of Pech informants. Informants occasionally differed by as much as a decade in their recollection of events occurring since mid-century. Such variations in the oral histories provided by various informants is no doubt also somewhat attributable in part to the
Figure 42. Sites of Pech occupation in municipio Culmi.
sometimes complex nature of Pech movements during the latter half of the century. Not all former Pech settlements, particularly larger ones with more than one family of inhabitants, were abandoned at exactly the same time and not all of the former inhabitants always moved to the same new site. In general, however, the sites that were abandoned by the Pech during the 1960s and 1970s appear to have lost their Pech inhabitants over a relatively short time, a few years at most. Neither is it possible to use the settlement-level data provided by the national census of 1974 to determine which sites had been abandoned by the Pech at that time for, among the 92 settlement sites recorded for the municipio in that census, all but one of the twenty-one former Pech sites identified above, Belén, appear in the census list. Each of the other twenty sites except for Wampusito recorded some population in 1974 but the census did not distinguish the indigenous from the ladino inhabitants. According to informants’ accounts, many former Pech sites had apparently already been abandoned by 1974 so the populations enumerated in those old Pech sites in 1974 would have been ladino. Unfortunately, the decade of the 1970s was a time when the Pech population of municipio Culmi was still redistributing itself in response to the increasing ladino presence and informants’ accounts are insufficiently precise to say with certainty which sites were still inhabited by Pech, which sites were inhabited by both Pech and ladinos, and which sites had already been abandoned by the Pech at the time of the census.

Several sites can be identified that appear to have been abandoned as sites of primary occupation, although not necessarily as sites of agricultural fields which may have had field houses for temporary occupation, by the Pech prior to around 1970. The
site of Las Minas was not reported to exist by any of the publications here considered but informants reported that the Pech had formerly occupied the site. One informant, now a resident of Pueblo Nuevo Subirana, reported that she was born in Las Minas in 1931 and that her family moved from that site to La Danta around 1936. The Pech continued to work their land in Las Minas after moving to La Danta but it is not known for how long. The sites of Pedernales, Punta de Piedra, and Río Largo were each last reported as settlements within municipio Culmi around 1930 in the Monografía's 1935 publication. The fact that these sites were not mentioned in subsequent reports, particularly that of Helbig, is, however, no guarantee that they did not continue to be inhabited by Pech well into the century. There is, however, no other evidence to support a Pech occupation of these sites much beyond the 1935 report. As discussed above, the only evidence available for a Pech occupation of Pedernales comes from the published reports and two informants' rather indefinite reports. Similarly, the sites of Punta de Piedra, which is now the caserio of La Providencia, and Río Largo were each reported to exist around 1930 by the Monografía but were not mentioned by Helbig in 1953 and did not come immediately to most informant's minds as sites of recent Pech occupation. Outside of the published reports, the only evidence obtained for a former Pech occupation of Río Largo was one informant's statement that the site used to be a Pech caserío consisting of one house, the date of whose abandonment was unknown, and the appearance in the INA title petition data of one birth in Río Largo in 1920. The individual born in Río Largo in 1920 was included among the inhabitants of Pueblo Nuevo Subirana in the 1976 Pech census (Censo Familiar 1976). No births in Punta de
Piedra were recorded in the INA petition but a Pech resident of Las Brisas de Pisijire reported that she was born at that site. She was married to a man who was fifty years old in 1992 and is believed by this researcher to be approximately the same age or slightly older. She did not provide a date at which the Pech left Punta de Piedra but her birth there indicates a Pech presence at the site around 1940 or before. She was listed among the residents of Pisijire in the 1976 census. Only one other informant acknowledged Punta Piedra as a site of former Pech occupation and he believed that the Pech had left the site around 1930, before ladinos began to arrive in the area, which he believed to have been around 1965.

The relatively high lack of knowledge among Pech informants concerning Pedernales, Río Largo, and Punta de Piedra, as well as the limited birth histories reported by one informant and the INA petition, fail to contradict, in these cases, the pattern observed in the published reports of settlement sites which had been reported in the early decades of the century being omitted from Helbig’s mid-century report. It is possible, perhaps even likely, that each of these three sites, like that of Las Minas, was abandoned by the Pech as a site of primary occupation by mid-century or shortly thereafter. It must be remembered, however, that the evidence concerning these sites is primarily negative and this leaves room for much uncertainty. The Monografía reported each of these sites as settlements around 1930 and birth histories indicate Pech occupation of Río Largo in 1920 and Punta de Piedra around 1940. Aside from these positive indications, it is Helbig’s failure to mention these sites, although he certainly omitted other sites of known Pech occupation at the time, and this researcher’s Pech informants’ lack of
information concerning the sites that argue for Pech abandonment by around mid-century. It is certainly possible that some Pech continued to occupy or utilize the land at these sites after the 1950s without that fact being discovered by either Helbig or this researcher. It seems extremely unlikely, however, that significant numbers of Pech could have occupied these sites into the 1970s only to have been forgotten by this researcher’s informants some twenty years later. It is very doubtful, therefore, that any of the 21 inhabitants of Pedernales, the 84 of Río Largo, or the 230 of Punta de Piedra recorded in the 1974 census were Pech.

The final site that appears to have been abandoned by around mid-century is that of La Colonia. La Colonia was reported to be a site of Pech occupation by only one of the published reports from the late 1800s and early 1900s, that of Conzemius, although the site also appeared on a 1901 map compiled by Karl Sapper. Conzemius reported that in 1919 La Colonia was the site of “una pequeña hacienda de ganado y dos ranchos de indios payas” (1928: 18). By 1953, Helbig reported only that La Colonia was the site of a sawmill that had ceased operations before 1950 (1953: 67). He did not report any continued occupation of the site in 1953. Helbig’s acknowledgment of the former existence of the site while failing to mention it as a current site of occupation indicates that it was probably uninhabited at that time. This indication, coupled with informants’ failure to identify La Colonia as a site of former Pech occupation and the lack of any recorded births in the available data, leave no reason to assume that the site was still inhabited by Pech, or anyone else, at mid-century.
Of the fourteen identifiable sites of former occupation in municipio Culmi during the twentieth century which have been abandoned by the Pech to date, then, five, La Colonia, Las Minas, Pedernales, Punta de Piedra, and Rio Largo, can reasonably be assumed to have lost their permanent Pech populations by mid-century or shortly thereafter and were almost certainly devoid of Pech occupants by the time of the 1974 census. Among the remaining nine abandoned sites, six appear to have lost most or all of their Pech inhabitants by about 1970 and two, La Danta and Pisijire Arriba, were probably abandoned after 1970. The cabecera of Culmí probably lost its Pech population over a longer period of time, as a few individuals continued to live there into the 1980s and even the 1990s, but most of the Pech appear to have left Culmí during the middle and late 1960s. Jesús Lanza et al. gave conflicting reports of the Pech abandonment of the cabecera, stating at one point that they inhabited Culmí only until 1963 while elsewhere reporting some twenty-five Pech inhabitants still in the town in 1985 (1992: 11, 14). Holt (1974), however, reported that only one Pech family remained in the town in 1974 and this was still the case in 1992. Of course, the Pech abandonment of Culmí was probably as much a process of changing ownership of property in the town as it was a loss permanent inhabitants since the Pech occupants traditionally spent much of their time in the outlying settlements where they had agricultural fields. This contention is supported by the surprisingly few reports by Pech informants reporting the movement of families or households from Culmí to other Pech settlements compared to the accounts of such movements from one of the outlying settlement sites to another. Although several individuals who are now residents of other
sites were reported to have been born in Culmi, only one account, from La Campana, described the movement of a family from Culmi and this informant reported that she and her husband had moved from Culmi in the early 1980s to the site near their fields. Most informants whose families had once owned property in Culmi apparently considered themselves to also have been residents of the sites at which their fields were located and did not speak in terms of moving from Culmi. Rather, it appears that the Culmi residents sold or abandoned their town property to ladinos and began to reside even more permanently in their field houses. Few informants specified the exact date at which they left their Culmi houses to live permanently in the outlying sites, but more general accounts emphasized the decade of the 1960s, and particularly the period from 1965 to 1970, as the time during which most of the Pech properties in Culmi were abandoned.

Four of the eight now-abandoned sites remaining to be considered, Aguaquire, La Danta, Pucuyo, and Pueblo Viejo, were reported as inhabited sites by Helbig in 1953 while two others, Pisijire Arriba and Pozo Hondo were not mentioned in any of the published reports. The sites of Belén and Wampusito had each been reported prior to Helbig’s work but were not mentioned by Helbig even though there are good indications that Pech occupants inhabited the vicinity of both sites after the time of his writing. Belén was reported as a settlement site during the 1930s in the Monografía and was among the few sites mentioned by Lunardi in 1943. Both of these sources also included Pueblo Viejo among the settlements of the munici piedo and Lunardi’s description indicated that the sites were located very close together, perhaps even that Belén was the site of two ladino houses within the larger area known as Pueblo Viejo (1943: 35). His
description generally concurs with those of Pech informants who had some knowledge of Belén. Most informants were unsure of Belén's location but the few who did claim knowledge of the old site reported that it was near to, or the same as, Pueblo Viejo. The most reliable oral report came from a sixty-five year old resident of Pueblo Nuevo Subirana who was raised in Pueblo Viejo and who associated the site of Belén with a particular tree in Pueblo Viejo. It would seem, then, that the site of Belén, which was not reported by Helbig nor included among the places enumerated in the 1974 census, eventually came to be considered a part of Pueblo Viejo rather than a distinct settlement site. The date of Pech abandonment of Belén, therefore will be addressed further in conjunction with the consideration of Pech abandonment of Pueblo Viejo. The settlement site at Wampusito was reported only once by the published reports of the late 1800s and early 1900s, in Perry's 1899 settlement list. There is, however, evidence to indicate that the site was inhabited by Pech during the first half of the twentieth century and continued to be at least utilized, if not inhabited permanently, past mid-century. An informant who was born in 1931 and is now a resident of Pueblo Nuevo Subirana reported that he lived in Wampusito, near the mouth of Quebrada de Las Iglesias, until the time of his marriage to a woman from La Danta. After the marriage, the family lived in La Danta but continued to cultivate land in Wampusito, as well as in La Danta. This informant and his relatives stated that there was only a single house in Wampusito at the time of his marriage and that all of the inhabitants of Wampusito moved to La Danta at the same time that he did. Neither this informant nor his wife reported the date of their marriage but a nephew placed the date at about 1945. In spite of these reports that
Wampusito was vacated as a site of primary occupation shortly before mid-century, however, evidence from the INA land title petition’s birth data provides support for the statements that the site continued to be utilized, and possibly temporarily occupied, for some time thereafter. Wampusito is recorded as the place of birth twice among the petition’s 145 signatories whose birthplace was identified as a site within municipio Culmi. The earlier of the two Wampusito births was recorded as 1938 and is within the range of the site’s occupation as indicated from the oral reports. The latter birth date for the site found in the petition was, however, in 1957 and beyond the time which the site’s residents were reported to have relocated to La Danta. This birth record indicates that Wampusito was utilized and inhabited at least occasionally by Pech until around the time when ladino in-migration began to increase in the municipio. It is not known when the agricultural fields were abandoned. The former resident of Wampusito reported that he worked fields and had coffee plantings there while his family lived in La Danta but he did not indicate whether he continued to utilize the site after moving to Subirana in the 1970s. The 1974 census documents are consistent with the informants’ reports in that, while including the site among the listing of caseríos, they did not record any population or houses at Wampusito. By 1988, however, the census códigos reported a population of eighty-eight persons and thirteen houses at Wampusito.

The site of Pech occupation near the mouth of Quebrada Pozo Hondo was not reported in any of the published reports from the first half of the century or before yet informants reported that it was inhabited by a single family as late as 1964. In that year the family in Pozo Hondo moved to Vallecito and no Pech have lived there since.
Because there are no records of births in the available data or first person accounts of residential history in Pozo Hondo, it is impossible to guess whether the site may have been inhabited throughout most of the century until the time of its abandonment.

Like Pozo Hondo, the other five abandoned sites yet to be considered were all probably vacated after 1960, after the influx of ladin os into the municipio began to increase dramatically, although the reported date at which some were abandoned varied among informants. Except for Pisijire Arriba, each of these sites was reported by Helbig to be populated in 1953, although he indicated that Pueblo Viejo was then at least partially inhabited by ladin os and did not specify the ethnic composition of Aguaquire’s population. Two of the sites were shown to be inhabited by Pech into at least the late 1950s, one into the mid-1960s, and two into the early 1970s by the INA petition birth data and all were reported to have been inhabited by the Pech into at least the mid-1960s by Pech informants. Only two informants, neither of whom were ever residents of the site, provided dates for the abandonment of Pucuyo, now alde a Paulaya, and their histories differed greatly. One informant stated that the Pech abandoned Pucuyo around 1955 as ladin os began to move into the area. The other informant believed that the one or two Pech families inhabiting Pucuyo moved from that site to Pueblo Nuevo Subirana in 1974. Other evidence indicates, however, that it is doubtful that either of these two dates reported for Pucuyo’s abandonment is correct. Other than the specified dates, however, the remainder of these informants’ combined accounts, that only one or two Pech families abandoned the Pucuyo as the ladin o population at the site increased, appears to be substantially correct. Two other informants did not provide dates for
Pucuyo’s abandonment but did report that the most recent Pech utilization of Pucuyo prior to its abandonment was as a site of agricultural fields worked by inhabitants of the Marañónes site. As such, the site would have been utilized and temporarily occupied by Pech whose primary residence was in Marañónes, after they had ceased to live permanently in Pucuyo, which creates some ambiguity for informants relating the time at which Pech occupants left the site. One of the latter two informants, who was born in Vallecito in 1946 and is now one of the leaders of Pueblo Nuevo Subirana, reported that he was raised in Pucuyo but did specify when he left the site where he spent his youth. That he and his family lived in Pueblo Nuevo Subirana by at least 1976 is indicated by their listing in the 1976 census of Subirana (Censo Familiar 1976). The available birth data can be used to establish that one of his daughters was born in Marañónes, the former name of the Pueblo Nuevo Subirana area, in 1967, further indicating that the family’s permanent residence was in Subirana, and not in Pucuyo, at least as early as the latter 1960s. Helbig highlighted the importance of the lone Pech house at Pucuyo as a way station for travelers in 1953 and the only birth recorded at Pucuyo in the INA petition was dated 1958 (Helbig 1965: 67 errata). These sources indicate a, probably exclusively, Pech occupation of the site until at least 1958. The birth of the informant’s daughter in Marañónes in 1967 indicates that at least some of the Pucuyo Pech had transferred their residence to Marañónes by that date. After the Pucuyo Pech began to live on a permanent basis in Marañónes, Pucuyo may have continued to be temporarily occupied during cultivation periods into the 1960s but it is unlikely that it continued to be utilized much into the 1970s. Considering these data, then, it seems likely that the
Pech ceased to occupy Pucuyo on a permanent basis during the early or middle years of the 1960s but probably continued to maintain agricultural plots there until the density of ladino occupation at the site became too great, sometime in the latter 1960s or early 1970s. It is almost certain that none of the forty-five inhabitants of the nine houses enumerated at the site in the 1974 census were Pech.

The evidence gathered by this researcher is fairly consistent in establishing that two other sites, Aguaquire and Pueblo Viejo, were also vacated during the latter 1960s and by at least 1970. Aguaquire was consistently reported by informants to have been abandoned by the Pech between 1960 and 1970 and former inhabitants of the site currently residing in the La Campana reported more specifically that many Pech left Aguaquire around 1966. Two written sources, however, reported that the site remained occupied by a various number of Pech into the late 1970s. Holt (1974) and Bertrand Soto (1979:35) reported, based upon information provided by Pech informants, that four Pech families and 119 Pech individuals still inhabited Aguaquire at the time of their respective research. These reports are almost certainly in error, however, considering both informants' reports to this researcher and the Pech propensity to leave settlements as the local ladino population grew. Aguaquire’s recorded population of 401 in the 1974 census indicates that the site had already by that time experienced a large increase in ladino population that would have been sufficient to encourage its Pech inhabitants to relocate to other sites. Holt’s and Bertrand Soto’s informants’ accounts may therefore have classified some of the Pech inhabitants of nearby sites comprising part of community Agua Zarca, particularly the sites of Coyolito and Zopilote which are
officially caseríos of aldea Aguaquire, as inhabitants of Aguaquire. The possibility of such a misidentification is buttressed by the experience of this researcher when, on at least one occasion, a Pech informant reported Aguaquire to be the site of several Pech houses only to determine that it was actually the inhabitants of Zopilote to whom he was referring. Even if this was indeed the case, however, the figures reported by Holt and Bertrand Soto do not always correspond well with the data for the concerned sites recorded in the 1974 census. Any potential Pech population in Aguaquire cannot be discerned from the census documents and they cannot be used, therefore, to discount these researchers’ reports, which both indicated Pech populations of substantially less than the census’ total population of 401 persons in Aguaquire. Holt’s report of four Pech families in Aguaquire approximates, however, either the thirty-six persons reported for Cerro del Zopilote or the twenty-nine reported for Coyolito in the 1974 census but seems low as a representation of the combined population of sixty-five inhabitants reported for the two sites. Four families would also be a reasonable number to have inhabited the three houses reported by the census in Coyolito but less so the eight houses reported for Cerro del Zopilote or the combined total of eleven houses at the two sites. The much larger number of 119 reported Pech inhabitants of Aguaquire reported by Bertrand Soto also exceeds the sixty-five persons enumerated by the 1974 census at Coyolito and Zopilote and the 179 total Pech inhabitants which he reported for Aqua Zarca and Aguaquire likewise exceeds the 118 total inhabitants reported by the census for all four of the constituent sites of community Agua Zarca. The combined Pech population reported by Bertrand Soto for Agua Zarca and Aguaquire is, however, very
close to the 178 Pech reported for community Agua Zarca in 1985 (Jesús Lanza et al. 1992: 11). While Holt’s informant, then, may have ambiguously reported some Pech residing in nearby caseríos as inhabitants of Aguaquire, Bertrand Soto’s informant’s reported Aguaquire Pech population seems much too large to have been representative even of community Agua Zarca’s three constituent sites of Coyolito, Zopilote, and La Campana. Considering Holt’s much lower, and probably misplaced, estimate of Aguaquire’s Pech population from 1974, Cáliz et al.’s failure to even mention Aguaquire as a site of Pech occupation in 1977, and data presented in this section from this writer’s research, it appears, then, that Bertrand Soto’s report of a large Pech population inhabiting Aguaquire at the end of the 1970s is erroneous. The latest of six births reported for Aguaquire in the INA land title petition was in 1959 and indicates that the Pech did inhabit the site until at least about 1960. The lack of birth records after 1973 in the petition data and the fact that many of the former Aguaquire Pech moved to sites other than Pueblo Nuevo Subirana and were not participants in Subirana’s dealings with the INA, however, limit the document’s usefulness in determining the date of abandonment of Aguaquire by the Pech. Many of the former Pech inhabitants of Aguaquire now live in the nearby La Campana, Zopilote, and Coyolito sections of community Agua Zarca as well as in Pueblo Nuevo Subirana. The movement of Pech from Aguaquire to various sections of community Agua Zarca, particularly to the sites of Zopilote and Coyolito, appears to have mirrored the Pech exodus from Culmí in that they left a rather large, long-existing settlement site as ladino occupation increased to live closer to the sites of their agricultural plots. The bulk of the Pech population of both
Aguaquire and Culmi, according to informants’ reports, also appears to have abandoned both sites during the same period, from 1965 to 1970. By 1974 Aguaquire had a population of 401 persons, none of which, it is believed, were Pech.

The site of Pueblo Viejo was also consistently reported by informants to have been abandoned by the Pech between 1960 and 1970. As described above, the site of Belén is no longer included among the official settlements of the municipio and Pech informants with a knowledge of the old site indicated that it is part of the area now known as Pueblo Viejo. Information pertaining to settlement at Belén will, therefore, be considered together with that of Pueblo Viejo. In 1943 Lunardi reported the presence of three ladino houses in Pueblo Viejo-Belén and of other Pech and ladino houses in the vicinity. He stated that, “A la orilla de este lugar, de Pueblo Viejo, hay tres casas de ladinos; a una legua de distancia se encuentran viviendas de Payas; y a un cuarto de legua, viviendas de Payas y ladinos” (1943:35, emphasis Lunardi’s). His statement leaves the location of the Pech houses somewhat uncertain but indicates that Pech lived within at least a league, and perhaps as close as one-quarter of a league, of Pueblo Viejo-Belén. Helbig did not mention Belén and his report left the possibility of a Pech presence in Pueblo Viejo in 1953 uncertain. It is clear from his description that he intended to report that Pueblo Viejo was inhabited at least in part, and possibly entirely, by ladinos and he failed to include Pueblo Viejo among the sites of Pech settlement in municipio Culmi (1965: 67 errata, 235). Birth records and Pech informants’ accounts, however, strongly indicate that the Pueblo Viejo area was inhabited by Pech at the time of both authors’ visits to the region. The INA title petition recorded only one birth for the site
of El Velem and its date, in 1944, was just a year after Lunardi's visit. Seven births were recorded for Pueblo Viejo and they ranged in date from 1935 to 1965. This range spans a time period from before Lunardi's visit to well beyond Helbig's travels through the region and lends support to informants accounts of a Pech presence there until between 1963 and 1970. Various informants agreed that when the Pech finally left Pueblo Viejo the majority moved to Jocomico while a few went to the site of Pueblo Nuevo Subirana. One informant from Pisijire placed the date of Pech abandonment of Pueblo Viejo at 1963 but former inhabitants of Pueblo Viejo now living in Jocomico reported that they had moved in 1970. Prior to the abandonment of Pueblo Viejo, the families of the two sites were bound via marriage ties and the inhabitants of each site were reported to have worked land in both locations. As the ladino population around Pueblo Viejo increased, the Pech reportedly sold their land there and moved to more remote sites. Six of eight families then in Pueblo Viejo were reported to have moved to Jocomico while the other two families moved to Pueblo Nuevo Subirana. Subsequently, about 1990, three families totaling about eighteen persons, some of whom originally came to Jocomico from Pueblo Viejo, left Jocomico for Pueblo Nuevo Subirana. The census of 1974 recorded a total population of 128 persons in Pueblo Viejo, none of whom, according to the available data, were by that time Pech.

The final two former Pech sites to be considered, La Danta and Pisijire Arriba, were both vacated by the Pech during the 1970s and their abandonment was closely tied to the establishment of Pueblo Nuevo Subirana at the site formerly known as Marañones. In spite of their relatively recent abandonment, and its coincidence with an event of no
small importance to all of the Pech of *municipio* Culmí, however, there was not complete agreement among informants as to the actual date of abandonment of these sites. Nor, in fact, is the date of the foundation of Pueblo Nuevo Subirana itself agreed upon by all sources. Various accounts, both written and oral, place the date of Subirana's foundation in 1972, 1973, or 1974. As the Pech felt obliged to relinquish properties in Culmí and various outlying settlements to the increasing *ladino* population during the 1960s and because they had lost political control over the municipalidad in 1958 and, with it, over the ejidal property of Culmí which had been granted in 1898, the Pech determined to seek out a new site which could serve as a focus of Pech settlement in the *municipio*; a site where all Pech would be welcome to live and work, where the Pech could live apart from the culturally different and rapidly growing *ladino* population, and where the Pech could retain control over a parcel of communally-owned land sufficient to meet their subsistence needs and to assure their cultural survival. During the 1960s and 1970s, the period of most rapid change for the Pech of *municipio* Culmí, the Catholic church and various social and political alliances were active promoting the interests of labor and the peasantry throughout the country (Morris 1984: 78-83). Both religious and secular advisors appear to have supported the Pech in the early stages of their efforts to establish a new core settlement in the *municipio* but the Pech were effectively cut off from these development resources after the violent response of some of Olancho's large land-holders and military officials to the demands and actions of the peasant movement in June of 1975 (Estudio Socio-Económico 1977: 42-44; Jesus Lanza et al. 1992: 76-78). With the assistance of the Unión Nacional de Campesinos (UNC)
and the local Catholic priest, Padre Iván Betancourt, the Pech decided to establish their new community near to the old Pech settlement site of Marañónes and to request that the government survey and grant them title to the chosen land. Jesús Lanza et al. reported that the Instituto Nacional Agrario surveyed a parcel of 3716 manzanas at Pueblo Nuevo Subirana in early 1974 which was awarded to the Pech (1992: 77). The specific character of this reported grant is uncertain, however, as it was superceded by a later survey and the awarding of a provisional guarantee, in lieu of a title, to a larger tract in 1991. These authors place the date of Pueblo Nuevo Subirana’s foundation on the first of April, 1974 (1992: 16). One informant, a leader of community Subirana, also cited this as the date of the ceremony held to mark the settlement’s foundation in which Padre Betancourt led the Pech in burying three stones on the site to symbolize the burial of the old name of Marañónes upon the re-christening of the site, in honor of the priest who had first worked to achieve legal recognition of Pech land rights in the municipio, and its dedication as a place open to all Pech. It should be noted, however, that this informant undoubtedly had access to the Jesús Lanza et al. publication and that his statement to this researcher contradicts the date reported for the ceremony in the Estudio Socio-Económico, which was written from a time much closer to the actual event and whose author apparently relied upon information supplied by this same informant, of March first, 1972 (1977: 43). Several other informants from Subirana placed the foundation of the settlement in 1972 and 1973. The ceremony commemorating the establishment of Pueblo Nuevo Subirana as a new focal point of the Pech culture in municipio Culmi, then, very likely took place sometime over the two year period between early 1972 and
early 1974 but its exact date cannot be determined from the available reports. Since all sources seem to agree upon Padre Betancourt's participation in the foundation of the community, however, it can at least be established that the ceremony must have taken place before his death in the events now known as the Horcones massacre of June 25, 1975. Holt (1974) noted that in February of 1974 the site was referred to by both the names Marañones and Pueblo Nuevo Subirana. The site has apparently grown rapidly since its foundation, although the population reported at the site in various reports since 1974 fluctuates significantly. The Estudio Socio-Económico reported that twelve families inhabited the site at the time of its foundation, which this report placed in 1972, and Holt reported an approximate population of 150 persons in sixteen houses in 1974. The 1974 census recorded a total of 154 persons in eighteen houses at Marañones Arriba, as the site was represented in that census, and its associated Pech caserio of El Limón. Subsequent sources from the 1970s reported Subirana's population as 221 persons in 1976, 282 in 1977, and 230 in 1979. Jesús Lanza et al. then reported 310 inhabitants at the site in 1985 while the 1988 census enumerated a total population of only 282 in Pueblo Nuevo Subirana and El Limón. Most recently, censuses of the settlement conducted by the Pech themselves enumerated 321 inhabitants in 1990 and 369 in March of 1992.

Because Pueblo Nuevo Subirana was intended by its founders to be a new focal point of Pech habitation and subsistence in the municipio where the Pech could live together apart from the ladino population, all Culmí Pech were invited and encouraged to relocate to the new site. Many, of course, did not move to Subirana but some
individuals and families have left many of the other Pech settlements in the municipio for the new site and two former Pech sites appear to have been abandoned completely in favor of Subirana about the time of its foundation. The former site of Pisijire Arriba, which is now aldea Suyapita, was not reported as a site of occupation by any of the published reports until the 1974 census. The site was apparently occupied by Pech inhabitants since at least the 1930s, however, as one informant reported that he was born in Pisijire Arriba in 1937. Another informant who was born in 1914 reported that his family moved to Pisijire Arriba after his marriage and remained there until the Pech abandoned the site for Pueblo Nuevo Subirana in the 1970s and the INA petition recorded a 1950 birth in Cabecera Pisijire. The site was certainly occupied, then, during the latter decades of the first half of this century and perhaps earlier. Informants' reports generally agreed that almost all of the Pech of Pisijire Arriba left the site to move to Pueblo Nuevo Subirana over a short period of time, a matter of months, in the early to mid-1970s as more and more ladinos began to occupy the area. Estimates for the time at which the Pech abandoned Pisijire Arriba varied, however, from about 1970 to 1976. This does not necessarily imply that the Pech vacated Pisijire Arriba little by little over the entire period as much as it does that informants' memories on the matter are inexact and inconsistent. One former inhabitant of Pisijire Arriba, for example, reported in 1992 both that the Pech from that site had moved to Subirana about 1970 and that they had lived in Subirana for sixteen years. Another former resident of Pisijire Arriba evidenced similar inconsistency by reporting a variety of dates pertaining to the Pech abandonment of the site on several occasions in 1991 and 1992. He reported that he had lived in
Subirana for twenty-two years, having moved there in 1969 to marry, and that the remainder of the Pisijire Arriba Pech had come to Subirana about two years later. He also specified on separate occasions, however, that the year of departure of the majority of the Pech from Pisijire Arriba was 1972 and 1976. That the Pech abandonment of Pisijire Arriba occurred within the range of dates supplied by this informant, from 1972 to 1976, is supported by documentary evidence but a more exact date, or even whether the Pech had left the site by the time of the 1974 census, is not discernable. The INA petition recorded one birth in Pisijire Arriba in 1971 and two in 1972, indicating that the Pech still inhabited the site by the latter date. And each of the five families of Pueblo Nuevo Subirana who were reported to formerly occupy Pisijire Arriba, including the three individuals whose births were reported there in 1971 and 1972, appear in the Subirana section of the 1976 Pech census, providing a strong indication that the Pech had by September of 1976 completely abandoned Pisijire Arriba. The limited precision of the available data preclude, however, a reasonable estimate of how many, if any, of the 84 inhabitants reported to inhabit Suyapita by the 1974 census were Pech.

Unlike the case of Pisijire Arriba, the site of La Danta, has been known to exist for most of this century. It was reported as an inhabited place in 1916, 1919, 1930, and 1953. No mention was made of ladino inhabitants at the site in any of these sources and it may be assumed, therefore, that the site was inhabited largely or entirely by Pech throughout the first half of the century. Helbig indicated that the seven houses at La Danta were occupied in 1953 exclusively by Pech, in contrast to Culmí and Pueblo Viejo, which he reported to contain some ladino occupants (1965: 66, 67 errata; 235).
Like Pisijire Arriba, however, the exact date of La Danta’s abandonment is uncertain in spite of its relatively recent occupation and the relocation of most of its Pech inhabitants to Pueblo Nuevo Subirana near the time of that settlement’s establishment.

Pech informants from Subirana unanimously agree that the Pech inhabitants of La Danta left the site in 1973 or 1974 when about five households moved to Subirana and one moved to Culuco. These oral histories conflict, however, with the latter 1970s’ published reports’ indications of a Pech occupation of the site after that time. The reports published in 1977 and 1979 each mentioned a continued Pech presence at La Danta, with the Estudio Socio-Económico reporting four families residing there and Bertrand Soto reporting a combined Pech population of 52 persons for Culuco and La Danta, although neither appears to have obtained their information from first-hand experience with the site. Because the official documents requesting recognition of Pueblo Nuevo Subirana as an agricultural cooperative by the Instituto Nacional Agrario did not include young children among the petitioners, recording only one birth from 1979, which was determined from the 1990 census to be an erroneous account of a 1973 birth, and only two births from 1972 and three from 1971, the birth data contained in the petition did not include any births that may have occurred in La Danta after 1970. Among the twenty-three births recorded in the petition for La Danta, seven were from 1965 or later, with one birth recorded each in 1969 and 1970. The petition data, then, support a Pech occupation of La Danta at least into the 1970s but can neither confirm nor contradict informants’ contentions that the site was abandoned by the Pech at least by the beginning of 1975. Most, but not all, of the individuals whose birth at La Danta
was included in the INA petition appear in the 1976 census of Subirana but, because the Pech censuses are known to contain occasional errors of omission and duplication, the most that can be supported by this fact is that at least most of the La Danta Pech resided in Subirana by September of 1976.

While it seems unlikely, then, that significant numbers of Pech inhabited La Danta after 1976, in spite of the two published reports to the contrary, another source provides evidence that the site may have contained Pech occupants at the time of the 1974 census. Holt (1974) relayed informants’ reports from February of 1974 that four Pech families still occupied four houses in La Danta at that time. His report does not explicitly contradict this researcher’s informants’ accounts of Pech abandonment of La Danta in 1973 or 1974 but does leave open the question of whether the La Danta Pech were by the time of the national census, conducted just one week after Holt concluded his initial visit to the Culmí area, enumerated among the inhabitants of La Danta or Subírana. Such a question arises from both the apparently mistaken reports of a few years later, which, like Holt also relied upon informants accounts for indications of Pech occupation of La Danta, as well as from comparison with the 1974 census data. Holt’s report of four Pech families occupying four houses in La Danta appears reasonable in light of the census’ enumeration of thirty-three inhabitants at the site but less so when compared to the census report of ten houses there. The average household size at La Danta derived from the census data is very low assuming that all ten houses were occupied. If the four Pech houses reported by Holt, and up to six houses according to informants’ accounts, were already abandoned at the time of the census count, however, the average
occupancy of the remaining four to six houses at the site is raised to a level more commonly encountered in the Culmi region. Neither does the close correspondence between Holt’s estimated population of 150 persons in sixteen houses and the census’ report of 154 persons in eighteen houses at Subirana remove all doubt that the inhabitants of La Danta were at the time of the census Pech. If the populations reported by both Holt and the census were exactly correct then the four extra inhabitants reported by the census could not have been due to the addition of four families from La Danta during the very short time between the two reports and the La Danta population recorded in the census would be assumed to have been the Pech families reported by Holt. This also assumes, of course, that Holt’s informants were not reporting a ghost Pech population at La Danta that had already relocated from that site to Subirana at the time of his research. If, however, the reported populations were less than exact, which was undoubtedly the case, and Holt’s informants reported a Pech population at La Danta that nevertheless no longer used the site as its primary residence then there would be no way to rule out the possibility that the former Pech occupants of La Danta had already moved to Subirana and that the thirty-three occupants of the site recorded in the census were actually ladinos from the census data and Holt’s report alone. Although the census data for Pueblo Nuevo Subirana may well have not been exactly correct, Holt’s reported population at the site was certainly not exact, as he himself specified that 150 persons was an approximation. Holt had also estimated that approximately 150 Pech occupied sixteen houses in Vallecito in February of 1974 while the 1974 census showed only 114 inhabitants in twenty-one houses and the 1976 Pech census counted only 120 Pech in
Vallecito, further indicating that Holt's figures were indeed rough estimates; there could easily have been significantly greater or fewer numbers of persons and houses at Subirana than reported by Holt.

It is not possible to determine with certainty, therefore, how many, if any, of the thirty-three inhabitants of La Danta recorded in the 1974 census may have been Pech. Informants reported that they had left La Danta as ladinos began to move into the area. One would expect, therefore, that the site's population would have risen from the six families reported to have lived at the site as ladinos moved in, and then to have fallen with the Pech exodus before rising again to its 1988 level of eighty-six ladino inhabitants. A population of thirty-three persons at the site could, then, approximate the Pech population prior to the arrival of ladinos, a mixed Pech and ladino population after the arrival of some ladinos and the departure of some of the former Pech occupants, or an entirely ladino population after the departure of all of the former Pech occupants. This researcher's informants reported that the Pech left La Danta sometime, perhaps somewhat gradually, in 1973 and/or 1974, while Holt's informants reported a Pech occupation at the site in February of 1974 and the 1976 Pech census indicated that the La Danta Pech had relocated to Subirana by September of that year. La Danta appears to have been in transition from a Pech-dominated to a ladino-dominated settlement around the very time of the 1974 census.

The foregoing consideration of the available data pertinent to Pech distribution in municipio Culmí allows us to produce an estimate of the municipio's Pech population at the time of the 1974 census. The estimate is subject, of course, to the ambiguities
inherent in the reconstruction of the Pech residential and migration history around and prior to the time of the census. A total of eleven sites in six communities were likely to have contained significant Pech populations in 1974 while other sites, particularly Culmi, Pisijire Arriba, and La Danta, could also have contained Pech occupants although it is not possible to know how many. The census reported a population of 118 persons in the four sites of community Agua Zarca, 62 in Culuco, 67 in Jocomico, 603 in San Pedro de Pisijire, 154 in Marañones Arriba and El Limón, and 114 in the two sites within community Vallecito. Obviously, not all of the enumerated inhabitants of Pisijire were Pech and it is also possible that some of the individuals counted in Culuco and Jocomico were also non-Pech. For estimation purposes, however, we shall consider the census’ enumerated population of Culuco to have been entirely Pech and will accept the populations reported by the 1976 Pech census of thirty for Jocomico and thirty-seven for Pisijire as reasonable approximations of their 1974 levels. Thus calculated, the total Pech population of municipio Culmi in 1974 totals to some 515 persons. This figure should be taken as a minimum likely Pech population in the municipio at the time, allowing for some continued occupation of Culmi, which Jesús Lanza et al. reported still contained twenty-five Pech inhabitants in 1985 but for which Holt reported only a single remaining Pech family during his stay in the town from April to August of 1974, the uncertainties as to the ethnicity of the inhabitants of La Danta and Pisijire Arriba at the time of the census, and the possibility of an underestimation of the 1974 populations of Jocomico and Pisijire from the use of 1976 counts. Acceptance of the full census counts for Jocomico and La Danta as Pech individuals plus an assumption of at least twenty-five
Pech inhabitants residing in Culmí, for example, would result in a population estimate of 610 Pech in 1974.

Although it is not possible to identify the exact date of Pech abandonment of some of their historic settlement sites, by the 1980s it appears that the Pech were largely reduced to their current distribution within the six remaining communities. Jesús Lanza et al. reported a total of some 864 Pech residing in the eleven settlement sites comprising communities Agua Zarca, Culuco, Jocomico, Pisijire, Pueblo Nuevo Subirana, and Vallecito in 1985. They also reported a remnant population of twenty-five Pech inhabitants in the cabecera of Culmí for a total Pech population of 889 in municipio Culmí at the time.

The national census of 1988 recorded populations of 156 persons in three of community Agua Zarca's four constituent sites, 49 in Jocomico, 272 in Subirana and El Limón, and 166 in Vallecito and El Naranjo, all of which were most likely to have been overwhelmingly or entirely composed of Pech individuals. The census also reported populations of 89 persons in Zopilote, 130 in Culuco and its subsidiary site of Saguacito, and 953 in Pisijire that each appear to have included some ladinos among the enumerated individuals. Zopilote was listed in the census as El Zopilote ó Las Delicias and apparently represented a combined enumeration for what had in the 1974 census been the two distinct sites of Cerro del Zopilote and Las Delicias. The fifteen houses and eighty-nine inhabitants reported for the combined site by the 1988 census were significantly greater than the four houses and thirty-eight inhabitants counted by this researcher in 1991 at the site which the Pech of community Agua Zarca refer to as
Zopilote. The 130 persons enumerated in the census at Culuco and Saguacito closely matches the 132 inhabitants counted there in 1992. Only 111 of these are believed to be of Pech heritage, however. The vast majority of Pisijire’s reported 953 inhabitants were, of course, of ladino heritage. Only sixty-seven Pech were counted in Pisijire in 1992 and informants reported that the Pech population had grown in recent years. The population counts from the early 1990s for these three sites can be used to represent the Pech population of the settlements in 1988. Although they probably overestimate the 1988 Pech population at these sites slightly, considering the likelihood of natural increase from 1988 to 1992, the 1990s figures are certainly a more accurate approximation of the 1988 Pech population than are the combined Pech and ladino figures reported by the census. The cabecera of Culmi was reported to have only three Pech residents in 1991, and only two by 1992. It is not known how many Pech may have still lived in Culmi in 1988, but any potential Pech inhabitants of the town at the time of the census will be ignored in this estimate since they were likely very few and the figures used for Zopilote, Culuco, and Pisijire probably already overestimate those sites’ 1988 Pech populations. The 1988 census data for the all-Pech sites combine with the 1990s approximations of the Pech component of the three mixed sites to produce an estimated 1988 Pech population in municipio Culmi of 859 persons. This estimated total population, derived primarily from the 1988 census count, is, however, less than the 889 Pech reported by Jesús Lanza et al. for 1985.

During the latter 1980s and early 1990s, the Pech in several of the settlements of municipio Culmi began in a few instances to reverse the trend of abandoning former sites.
of occupation and utilization to consolidate themselves in the fewer remaining Pech settlements which had dominated Pech distribution patterns since mid-century. Under increasing pressures of scarce land suitable for subsistence activities as ladinos continued to occupy lands surrounding and within their communities, some Pech began to seek out new, as yet unoccupied and unutilized sites, in which to live or utilize for agricultural production. Some Pech from communities Agua Zarca, Vallecito, and Culuco began to utilize new parcels outside of their communities' immediate areas for agricultural production and, in the case of Culuco, for at least temporary occupation. The Pech of community Pisijire initiated a search for a place where the community could relocate entirely to start a new, all-Pech settlement far away from their now ladino-dominated home. In spite of these recent efforts to acquire new lands and expand the total territory available for intensive exploitation by the Pech, no Pech individuals or families were determined to be residing permanently in the new locations as of 1992. Because the community of Pisijire had chosen a site within the Río Plátano Biosphere Reserve where new settlement and clearing of the forest is prohibited, it is necessary for them to receive government permission to relocate to that area and they have yet to be granted that permission. The Pech of Culuco have been utilizing their subsidiary sites for a longer period than have the other communities and have erected houses for temporary occupation of the sites. The census of 1988 recorded a population of 19 persons at one of those sites, Saguacito, but each of the Pech families utilizing Culuco’s new lands maintains a residence, and appear to send the majority of their time, in Culuco. For purposes of estimating the Pech population and distribution in the early 1990s, therefore.
we shall consider the entire Pech populations of the communities now seeking to expand their land-holdings to be residents of the communities' primary sites.

By 1992, then, significant numbers of the Pech of municipio Culmi inhabited only the six communities of Agua Zarca, Culuco, Jocomico, Pisijire, Pueblo Nuevo Subirana, and Vallecito. Community Agua Zarca is composed of four distinct settlement sites, Agua Zarca or La Vega, La Campana, Zopilote, and Coyolito, and community Vallecito is composed of the two sites of Vallecito and El Naranjo. All six of the sites comprising these two communities are reported separately by the Honduran census. Pueblo Nuevo Subirana is divided into recognized sections, which the inhabitants refer to as barrios, only two of which, Subirana and El Limón, are treated as distinct settlements in census documents. The remaining communities, although somewhat dispersed in the case of Jocomico, are treated as single settlement sites by the census. The Pech community of Pisijire is, of course, but a small minority of the larger aldea settlement of San Pedro de Pisijire which occupies a site on the outskirts of the aldea that the Pech call Las Brisas de Pisijire. Community Culuco contains a significant number of ladino inhabitants who live among, and are intermarried with, the Pech inhabitants while the Pech population of caserío Zopilote of community Agua Zarca, although living separately, appears to be consolidated with that of nearby Las Delicias for purposes of census reporting. Small numbers of other Pech may still reside elsewhere in the municipio. Two Pech individuals still inhabit the cabecera of Culmí and one Pech man was once reported to be living in Suyapita where he had married a ladina wife. Other individual Pech were also occasionally reported to be living in other, ladino-dominated settlements within
municipio Culmí. For all practical purposes, however, the Pech in 1992 were restricted to the various constituent settlement sites of the six communities listed above.

Redistribution of the Pech population continued, of course, into the 1990s as the Pech continued to adjust to the new realities of life in a more densely populated region but municipio Culmí’s Pech population movements during the 1980s and 1990s, with one particularly notable exception, were primarily from one Pech-occupied settlement to another. Various individuals certainly changed residences from one Pech community to another in the 1990s for purposes of marriage or economic betterment, but two reported migrations of larger groups stand out during this time. One group of about eighteen individuals in three families reportedly left Jocomico about 1990 for Subirana. Another, larger, group left municipio Culmí entirely to migrate to the Pech community of Las Marías on the lower Río Plátano early in the decade. The most reliable reports stated that a group ranging from forty to forty-five persons sold their land in caserío El Naranjo of community Vallecito in April of 1990 and left for Las Marías. An informant from Jocomico indicated that some of this group spent about a year at that site before continuing on to the Río Plátano site.

Data obtained from community censuses conducted by the Pech and from population counts conducted by this researcher in several of the Pech settlements contribute to an estimate of municipio Culmí’s Pech population in 1992. Censuses of Pueblo Nuevo Subirana, Vallecito and portions Agua Zarca conducted by the leaders of the respective settlements provide reasonable estimates of the populations enumerated although they should probably not be considered to be completely accurate counts.
Certain errors of duplication and omission were identified in the Pech-conducted censuses that were able to be examined in detail and comparison of the various sources of population data occasionally provides reason to doubt their complete accuracy. Some areas of disagreement or conflict among the various sources will be noted but each of the three Pech-conducted censuses mentioned above will be accepted as the most authoritative counts available for the respective communities. Pueblo Nuevo Subirana is by far the largest Pech settlement in municipio Culmí. The leaders of this community conducted a census of the population in both 1990 and 1992. The 1990 census listed 321 individuals as residents of the settlement and the March-April 1992 census counted some 369 inhabitants. At least one household of fourteen persons known to this researcher was, however, omitted from the latter census listing. The two censuses show an increase, then, of 62 persons over two years in the initial 1990 population of 321 which equates to an average annual growth rate of 9.23 percent over the two year period, assuming that the intercensal interval was exactly two years. This high rate of growth suggests that in-migration continued to contribute to Pueblo Nuevo Subirana’s population growth or that significant unidentified errors in one or both censuses occurred. Community Vallecito’s census of August 1991 counted 178 inhabitants in Vallecito and El Naranjo. This would be a reasonable population level given the 1988 census report of 166 inhabitants and informants’ statements that a December 1989 count tallied 160 Pech in the community except for the reported loss of forty to forty-five persons in April of 1990. Without the out-migration of this group, it can be assumed that the 1991 population would have been at least forty-five persons greater, 223
persons total, than the 178 actually counted then. This larger total would have required a very high rate of growth since the time of the 1988 and 1989 censuses. Informants in community Agua Zarca reported that their census recorded a total of 111 inhabitants in the sites of Agua Zarca and La Campana. This researcher’s own count of the two sites in October 1991 identified only 89 inhabitants, to which five more were added after they resettled in La Campana in early 1992. The higher figure from the Pech-conducted census will be accepted for our purposes here, however, considering the likelihood of inaccurate information provided by some households during this researcher’s count and the closer correspondence of the Pech count to that of the 1988 census, which recorded a total of 118 inhabitants at the two sites. The community Agua Zarca sites of Zopilote and Coyolito were not included in the Pech census and this researcher counted thirty-eight and thirty-one Pech occupants at those sites, respectively. The Pech population of community Agua Zarca as derived from the Pech census of Agua Zarca and La Campana and this researcher’s census of Zopilote and Coyolito, then, totals to 180 persons.

Only one other municipio Culmi Pech community, Pisijire, reported results from a self census during the 1990s and its February 1991 count of sixty-four inhabitants presents no conflict with this researcher’s count of sixty-seven Pech at the site in February of 1992. The remaining two communities, Jocomico and Culuco, did not report any self-conducted census results. Fifty-two inhabitants of Jocomico were counted in March of 1992 and 132 at Culuco in February of 1992. Unlike, Jocomico, however, the enumerated population of Culuco was not entirely of Pech heritage. A Pech woman who was born about 1915 reported that her family moved to Culuco from
La Danta when she was very young. This woman married a Tawahka man from Krausirpi who was reported to have been the only source of Sumu blood for the inhabitants of Culuco. Many of this Pech-Tawahka couple's children and grandchildren still live in Culuco and some have married more recently arrived ladinos, producing a variety of mixed-blood combinations in the settlement. The couple's children were, of course, only one-half Pech blood and the grandchildren, at most, three-quarters Pech. Many of the grandchildren have married ladinos, producing a great-grandchild generation of less than one-half Pech heritage. In addition to the Pech, ladino, and Sumu ancestors' contributions to Culuco, one young married informant at the site reported that his father was from Marcala, in La Paz department, and may have been partly of Lenca heritage, adding one more ethnic strain to the mixed population of the settlement. Some 111 of Culuco's enumerated inhabitants were reported to be at least partially of Pech heritage while the remaining twenty-one persons are believed to be entirely of non-Pech heritage.

For purposes of estimating the Pech population of municipio Culmi in the early 1990s, then, the population counts of 383 Pech in community Pueblo Nuevo Subirana, 178 in Vallecito, 180 in Agua Zarca, 52 in Jocomico, 67 in Pisijire, 111 in Culuco, and two in the cabecera settlement of Culmi can be accepted as the best available data. The figures combine to produce an estimated Pech population in the municipio of 973 persons in 1991-1992. Pech informants occasionally mentioned the presence of single Pech individuals or families or intermarried Pech and ladino families living in other settlements of the municipio. These isolated Pech residents were neither independently
confirmed nor counted by this researcher. While it is conceivable that these uncounted Pech could raise the total Pech population of the municipio as calculated here above 1000 individuals of at least partial Pech heritage, the total number of uncounted Pech in the municipio very likely amounts to less than the probable margin of error of the combined population counts utilized to produce the total population estimate.

The Municipio of San Esteban

The Franciscan missionary Antonio Liendo de Goicoechea is credited with founding the towns of San Antonio de Pacura, in municipio Gualaco near the San Esteban border and its aldea of Toro Muerto, and San Esteban as mission settlements for the Pech Indians between 1805 and 1807 (Conzemius 1928: 34-35; Lunardi 1943: 12; Massajoli 1970: 66). By just after the middle of the nineteenth century, when Subirana worked to acquire legal titles to land for the Pech in 1862, he sought lands northeast of San Esteban, indicating that the Pech may have already been displaced from San Esteban and Pacura. The 1862 survey documents treat the Pech as distinct and the parcels titled were in El Carbón and Boca de la Montaña which, one would assume, were in the area of greatest concentration of Pech inhabitants in municipio San Esteban at the time.

Population and Settlement to Mid-Century

Municipio San Esteban recorded a total population of 1,853 inhabitants in one pueblo, seven aldeas, and four caseríos in the 1887 census. Indigenous residents accounted for 334, or 18.02 percent, of the total population of the municipio and 304 Indians, or 91.02 percent of all enumerated indigenous inhabitants, were concentrated in

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one *aldea* and one *caserío*. Two hundred and twelve Indians were reported for the *aldea* of San Pablo, today's El Carbón, and 92 Indians were reported for the *caserío* of Santa María de Tayaco. One hundred percent of the population in both of these settlements was classified as indigenous. Only one other settlement in the *municipio*, Conquire, with 17 Indians reported among a total population of 103, recorded more than 6 inhabitants of indigenous origin. Of the 1808 Pech missions, San Esteban recorded 3 indigenous inhabitants and Pacura, which was at the time enumerated among the *aldeas* of San Esteban, only 2. An *aldea* then called La Boca recorded a total population of 123 persons, none of which were Indians. The location of *aldea* La Boca is uncertain and its population data somewhat problematic. The place name does not appear on modern maps of the *municipio* and it was not listed in the censuses of 1974 or 1988. The nearest place known as La Boca from these sources is west of the town of Gualaco in *municipio* Gualaco and was recorded as such in the 1887 census. In the maps of this work La Boca is represented at the site of the Boca de la Montaña parcel that was titled to the Pech in 1862 through the efforts of Padre Subirana. Such a placement, however, locates La Boca, with no indigenous population recorded among its 123 persons, between the 1887 places with the largest and third largest indigenous components, San Pablo and Conquire, respectively. The lack of any indigenous population recorded in a site that was only about 30 years before titled to the Pech makes the identification of La Boca with Boca de la Montaña suspect. Throughout the *municipio*, the 1887 data depict an indigenous distribution concentrated in its northern reaches and most heavily in the northeast centered on San Pablo, the site of modern El Carbón.
Two reports closer to the turn of the century strongly support the Indian distribution pattern within municipio San Esteban presented by the 1887 census. The 1895 census manuscripts studied by Davidson listed only the two Pech settlements of San Pablo and Santa María as Indian places in all of municipio San Esteban with 200 and 94 Pech inhabitants, respectively. These population figures agree very closely with those of 1887, which showed 212 persons in San Pablo and 92 in Santa María. Karl Sapper’s report on the Pech Indians dates to his trip through eastern Honduras in 1898, at which time he reported only the same two Pech settlements in the municipio. His population estimates of the two sites, however, varied significantly from the two census counts. He reported populations of 300 Pech at El Carbón and 50 at Santa María de Real. Sapper also reported that 30 Pech lived at Río Alazán a little north of municipio San Esteban in what is now municipio Iriona of Colón department. The Río Alazán site was not included in the listings of either the department of Olancho or Colón in either the census of 1887 or 1895 but, by 1919, was reported by Conzemius to have been a site of former Pech occupation (1928: 10, 16).

By around 1920, Eduard Conzemius could describe a Pech distribution in municipio San Esteban consistent with the works of the latter 1800s although the pattern was even more heavily concentrated in the northeast around El Carbón. Conzemius provided a more detailed listing of the caseríos associated with the immediate area of El Carbón than any of the three previously considered sources and also made mention of several neighboring ladino settlements, which Sapper and the 1895 census omitted, that serve to highlight the then more restricted nature of San Esteban’s Pech distribution.
Both Sapper and Conzemius noted the dual residence pattern that was common among the Pech of Culmi wherein a family maintained two houses, one in town and another, simpler hut, which Conzemius described as consisting of a thatch roof without walls where most of their time was spent, outside of town near their fields (Sapper 1899; Conzemius 1928: 12-13). Conzemius did not specify the same residential pattern for El Carbón but he did note that most of the inhabitants of the aldea (which he termed a municipio) "no viven en el pueblo mismo sino tienen sus hatos en los alrededores, en las fértiles vegas de los ríos y cerca de la montaña" (1928: 16). The term hato is the same that he used to describe the field houses of Culmi's residents and it contrasts to the "35 casas construidas de barro con techo de hoja de 'cuyamelito' o de 'tapuca'” (1928: 15) which he reported in El Carbón itself to indicate that the same dual system was used.

The residential affiliation of a Pech family with both the primary settlement and an outlying caserío helps to explain why both the 1887 census and Sapper failed to mention any of the nearby caseríos and simply reported the populations in terms of Culmi and El Carbón. The 1895 census did report the existence of five Pech settlements in the vicinity of Culmi but only Santa María was reported for municipio San Esteban in addition to El Carbón.

Conzemius' more detailed study provided a list of the caseríos associated with El Carbón, which he noted usually contained only two or three houses, but did not report the populations of each caserío (1928: 16). Instead, he, like the previous reports, gave only a population estimate for the entire area including El Carbón and its associated caseríos. These caseríos were Casa Quemada, La Bolsa, Jocomico, El Portillo, El
Corozo, El Corozalito, San Pablo, El Cumbo, Santa María o Tayaco, Paso Real, and El Alazán. Of these, only El Corozo and El Corozalito present significant difficulties in establishing their location. No sites of either name were listed in the 1974 census within the aldea of El Carbón or its neighbors and, although by the time of the 1988 census both aldea El Carbón and its neighbor to the west, Agua Blanca, listed a caserío El Corozal, their locations do not correspond to those reported by Pech informants as the earlier caserío sites. On the maps in this work, therefore, the 1919 sites of caserios El Corozo and El Corozalito are placed just north of El Carbón on the flanks of Cerro El Corozal o Corocito as described by informants. Not all of El Carbón’s associated settlements were dominated by the Pech by the time of Conzemius’ work in the area, however. While he noted that Santa María, Paso Real and El Alazán had previously been “habitados exclusivamente por indios payas” (1928: 16), he reported that, by 1919, Santa María o Tayaco was inhabited by ladinos or a mixed population of ladino and Pech, Paso Real was inhabited by ladinos, and the Pech of Río Alazán had abandoned that site to the ladinos to live in the vicinity of El Carbón (1928: 10, 16).

In terms of total population figures, Conzemius reported that the settlements of the Carbón area together held some 375 to 390 inhabitants of which about 300 were Pech (1928: 16). While he did not describe the size or population of the associated caseríos, he did note that El Carbón itself comprised some thirty-five thatch-roofed houses, a cabildo, and a small church (1928: 15). A report on the mission schools in 1914-1915 included in the appendix to the Monografía del Departamento de Olancho described El Carbón as slightly larger than did Conzemius, stating that the site “se
compone de 48 chozas, una ermita, un cabildo y una casa cural, que forman una plaza y
calle en la cumbre de una colina, . . . ” (1935: 115). Conzemius’ simple listing of
caserios does, however, vividly illustrate the territorial concentration of the Pech of
municipio San Esteban around their modern core area already by that time. It also
serves to allow us to make settlement-level comparisons to the situation described in
latter sources to demonstrate the magnitude of territorial loss suffered by the Pech of
municipio San Esteban during this century. In terms of population history we shall here
note that Conzemius reported a total of about 300 Pech living in the eight caserios in the
immediate vicinity of El Carbón.

Writing in 1922, Díaz Estrada’s brief historical account of the municipio San
Esteban Pech provides data that are generally in agreement with the above sources. He
noted that after the founding of San Esteban as a Pech mission early in the nineteenth
century, the Pech eventually abandoned the site for two destinations, Tayaco o Santa
María and El Carbón (1922: 496). He also reported that the 1916 national census had
recorded a population of 400 inhabitants for El Carbón, although not all of them resided
in the settlement itself (1922: 494). It is likely, then, that this figure represented the
population of the entire territory of El Carbón at the time, which Díaz Estrada described
as extending to Conquire, La Soledad, and Paso Real, and that it is therefore in general
agreement with Conzemius’ report of 375 to 390 inhabitants. Unfortunately, Díaz
Estrada did not distinguish between Pech and ladino inhabited settlements in the area nor
did he estimate the total number of Pech inhabitants among his reported population total.
Several other works from the middle decades of the century and prior to the 1974 census treat briefly or touch upon the Pech of municipio San Esteban but are of limited usefulness in establishing their settlement sites and populations. The *Monografía del Departamento de Olancho* (1935: 24-25, 113) reported a total population for municipio San Esteban of 2,259 in 1930 and 2,363 in 1933 but did not specify what percentage of those totals were of indigenous origin. It presented a listing of aldeas and caseríos within the municipio at two places within the work which, unfortunately, do not agree entirely with one another in terms of the places listed (1935: 23, 113). El Carbón, for example, appears in the latter section among the aldeas of the municipio but does not appear as either an aldea or caserío in the earlier list. None of the other caseríos that Conzemius listed reported as associated with El Carbón appear in either of the *Monografía*’s lists. In its sections on religion in municipio San Esteban and on the mission schools of eastern Honduras the *Monografía* (1935: 113-116) does specify that the Pech inhabited El Carbón and practiced the Catholic religion and that it had 48 houses and 30 students in its school in 1915 and 52 students in 1916.

Lunardi reported a total of only 150 Pech inhabiting the vicinity of El Carbón in his 1943 work but he did not specify the names of its associated caseríos (1943: 18). He did report a list of places, obtained from a 70 year old, probably ladino, informant from La Floresta, to which the Pech moved as they abandoned the town of San Esteban as its ladino population grew. The settlements listed by his informant were del Tigre, S. Rosa, De Majaos, Las Piñas, Cerro de Culuco, Pacayal, Jocomico, and San Pablo Viejo (1943: 17). The locations of del Tigre, S. Rosa, De Majaos, and Cerro de Culuco have yet to
be identified and none of the four appeared in either the 1887 census or the settlement listings of the *Monografía del Departamento de Olancho*. Neither were these four ever mentioned by informants to this researcher nor in other available Pech studies as former sites of Pech occupation. Lunardi's rough indication of their locations relative to La Floresta indicates, however, that each of the eight sites was somewhat removed from San Esteban in the direction of El Carbón which is as would be expected given the transition of San Esteban during the nineteenth century from a Pech mission to a *ladino* town by 1887 and the persistence of El Carbón as the major Pech settlement in the municipio.

Helbig's description of the Pech situation in municipio San Esteban in 1953 identified, aside from "una que otra choza del Valle del Sico, entre Paso Real y San Esteban" (1965: 78), only El Carbón as a site of Pech occupation. Helbig did not mention any of the aldea's associated caserios reported by Conzemius except for Jocomico, which he described as an unimportant place composed of three ranchos of *ladino* peones. El Carbón and Jocomico were the only settlement sites reported for the entire zone along the camino real between La Floresta, near Conquire, and Paso Real at the Río Sico. It is uncertain whether Helbig simply failed to report some small caserios that were then in existence, since most of those mentioned by Conzemius were again reported in the 1970s, or whether there might have been a temporary contraction of Pech population and settlement at the time. Helbig described the site of El Carbón as consisting in 1953 of only a small church, a bahareque building that served as the cabildo and school, the school teacher's house, and four chozas inhabited by Pech at the center
of the settlement and an additional ten chozas dispersed in the surrounding area (1965: 78-79). He reported the total Pech population of El Carbón at the time to be only 100 persons and noted that, in contrast to the situation in Culmi, the El Carbón Pech still lived separate from ladinos, with the school teacher being then the only ladino resident of the settlement (1965: 79, 235). Helbig’s population estimate for the Pech of El Carbón is the lowest total Pech population reported for the aldea during the entire period since the 1887 census and indicates a continued decline from the 150 Pech reported by Lunardi a decade earlier, which itself was only about half of the reported Pech population during the first two decades of the century. Unfortunately, it is simply not possible to know if any of the population estimates actually accounted for all of the Pech inhabitants. If Helbig’s settlement report and population estimate were correct, then the Pech of El Carbón had in 1953 experienced a significant population and settlement contraction since the early decades of the century. By the 1970s, however, both the Pech’ population levels and distribution appear to have expanded significantly from the situation described by Helbig.

Population and Settlement after 1953

Massajoli’s 1970 work, apparently relying heavily upon Conzemius and Lunardi as sources, reported about 300 residents in El Carbón but did not supply the names of any associated Pech caseríos. He did note, however, that some Pech caseríos of the surrounding mountains had disappeared while others had been reduced to only four or five houses (1970: 69). The time frame for the disappearance of these caseríos was not
specified and four or five houses would have been a not unsubstantial agglomeration of Pech outside of the major centers at the time.

The most useful estimation of the El Carbón area’s Pech population and distribution since the writing of Conzemius is found in a series of documents dating to the middle of the decade of the 1970s. The national census of population and housing of 1974, a census of the Pech population of Olancho conducted by Pech leaders in 1976, and a study of three Pech communities conducted by Cálix et al. in 1977 reported a population for El Carbón ranging from 339 to 352 persons and can be used in combination with other sources of information to estimate the extent of Pech distribution at the time. The Pech population of municipio San Esteban remained concentrated in the vicinity of El Carbón in the mid-1970s but several of the Pech caseríos to the west of El Carbón reported by Conzemius, Casa Quemada, La Bolsa, and El Portillo, were by that time occupied by ladinos and were officially classified as caseríos of aldea Agua Blanca.

Unpublished documents from the 1974 national census provide the best estimates of both Pech population levels and distribution in municipio San Esteban at the caserío level since the 1887 census and the works of Sapper and Conzemius. The 1974 census did not collect data on the ancestry characteristics of the population so no direct enumeration of the indigenous inhabitants at the time is available. Because the Pech had largely retreated from the areas of municipio San Esteban occupied by ladino immigrants over the preceding two centuries and the rapid influx of ladinos into the immediate vicinity of El Carbón had yet to begin in 1974, however, the total population of the identifiably Pech caseríos can serve as a close approximation of the actual Pech
population at the time. Conzemius' list of Pech-occupied caseríos in 1919 provides the starting point for identifying the Pech region in 1974 within which the caseríos may be assumed to have been dominated by the Pech. He reported that the site of Santa María o Tayaco was then at least partially, and perhaps primarily, inhabited by ladinos and that the aldeas of Conquire and La Soledad and the caseríos of Paso Real and El Alazán were predominantly or entirely of ladino population (1928: 16). These settlements together probably delimit the maximum extent of municipio San Esteban's Pech region at the time. Conzemius also listed the primary Pech caseríos then associated with the aldea of El Carbón, the major Pech settlement center of the municipio. Each of these, Casa Quemada, La Bolsa, Jocomicó, El Portillo, El Corozo, El Corozalito, San Pablo, and El Cumbo lies within twelve kilometers of the center of El Carbón and therefore within a smaller area even than that outlined by the surrounding ladino settlements. It is this more restricted area that approximates the extent of the Pech settlement region in 1919 although, with the exception of the mixed site of Santa María, it probably overestimates the extent of their distribution into the mountains to the southwest of El Carbón. Actual Pech settlement sites appear to have been concentrated near the camino real from San Esteban to Trujillo to the south and northwest of El Carbón. Given the historic pattern of Pech retreat before advancing ladino settlement and the lack of evidence for recent Pech occupation of sites distant from El Carbón, there is no reason to assume that settlements recorded in the 1974 census outside of the twelve-kilometer radius derived from Conzemius' report would be dominated by Pech inhabitants. Neither, however, on the basis of the 1974 census alone can all settlements within the
twelve-kilometer radius be assumed to be Pech sites. Other sources must be utilized, therefore, to establish the probability that any particular 1974 census site near El Carbón was Pech at the time. A variety of place names are used by various authors and official sources since Conzemius to identify the *caseríos* of the El Carbón area, too often without specifying which were inhabited by Pech and which by *ladinos*. The variety of names utilized, perhaps due to an ephemeral existence of some settlement sites or to reporting errors, creates difficulties in reconstructing the history of Pech populations and distribution in the area. Here we will consider the sites mentioned by Conzemius, Helbig, the 1974 census, Cálix et al.'s 1977 study, and information obtained from informants in the field to estimate the Pech distribution in northeastern *municipio* San Esteban in 1974.

The 1974 census recorded 13 populated settlements within 12 kilometers of El Carbón, including El Carbón itself and the neighboring *aldea* seat of Agua Blanca. All of the *caseríos* of *aldea* El Carbón as well as four *caseríos* of *aldea* Agua Blanca, Casa Quemada, La Bolsa, El Portillo, and El Guano and one unpopulated *caserío* of Agua Blanca, El Bijao, lie within the established radius. The exact locations of *caseríos* El Guano and El Bijao are unsure but they almost certainly fall within the designated 12 kilometer radius to the northwest of El Carbón and have been placed on maps in this dissertation according to their approximate locations as shown on the Dirección General de Estadística y Censos' map of San Esteban census places. Census working documents listed eight *caseríos* within the *aldea* of El Carbón, one of which recorded no resident population. In addition to the *aldea* settlement of El Carbón itself, the *caseríos* of the
aldea that recorded populations at the time were Agua Amarilla, El Cangrejo, El Pacayal, Jocomico, La Laguna, and Las Guayabillas. The site of El Cumbo was listed in the working documents but did not record any population at the time of the census. Of the eight Pech caseríos near to El Carbón listed by Conzemius, then, five, Casa Quemada, La Bolsa, El Portillo, Jocomico, and El Cumbo appear in the 1974 census documents, although El Cumbo recorded no population in 1974, and three, El Corozo, El Corozalito, and San Pablo, do not. Eight new sites within 12 kilometers of El Carbón appear in the census that were not reported by Conzemius—Agua Amarilla, El Cangrejo, El Pacayal, La Laguna, Las Guayabillas, Ojo de Agua, Agua Blanca and El Guano. The emergence of new settlement sites and the disappearance of old ones between 1919 and 1974 can be attributed to several possible causes. New sites could appear in 1974, of course, by the actual settlement of previously uninhabited locations or because of an omission in Conzemius’ earlier report. Sites reported in 1919 that did not appear in the 1974 census could likewise have disappeared because of the abandonment of a previously inhabited site or an omission on the part of census takers. If indeed the four caseríos reported by Conzemius that did not record any population in the 1974 census, El Cumbo, El Corozo, El Corozalito, and San Pablo, were uninhabited at the time of the census, it does not mean that they were permanently abandoned. El Cumbo and San Pablo both recorded populations again in the 1988 census.

Determining which of the settlements in the vicinity of El Carbón reported in the 1974 census remained occupied by the Pech requires comparison with other sources. Several published studies, official documents relating to the recent efforts to obtain land...
titles, and field work indicate that the Pech have been concentrated in the immediate vicinity of El Carbón, particularly in the sites of El Carbón, El Cumbo, La Laguna and Agua Amarilla, in the 1970s and 1980s. This leaves the ethnicity of the five settlements of aldea Agua Blanca to the west of El Carbón, Agua Blanca, Casa Quemada, La Bolsa, El Portillo, and El Guano and the remaining caseríos of aldea El Carbón, El Cangrejo, El Pacayal, Jocomico, Las Guayabillas, and Ojo de Agua open to question. Cálix et al.'s 1977 study of three Pech communities included El Carbón among the areas represented and was the first report on the area after the 1974 census. The report mentioned several settlement sites in the vicinity of El Carbón but it was unfortunately somewhat vague in its identifications of the ethnic composition of some of the settlements and further added to the confusion by reporting sites that did not appear under El Carbón or its neighboring aldeas in the 1974 census and that were not mentioned in later reports or by informants. The study reported that the community of El Carbón was composed of three barrios in addition to the center of El Carbón itself which it identified as La Laguna, Agua Amarilla, and El Pedrero (1977: 17). La Laguna and Agua Amarilla appeared as caseríos of the aldea in both the 1974 and 1988 censuses and are identified as Pech sites in almost all subsequent sources. The nearest site known as El Pedrero in the last two population censuses, however, is located along the Río Grande o Sico to the west of El Carbón in aldea Río Abajo, which is separated from aldea El Carbón by aldea Agua Blanca and is much too far away to be considered a barrio of El Carbón. No other reports nor any informants mentioned this settlement as a site of Pech occupation nor any closer site known as El Pedrero. The 1977 study specifically identified the
community of El Cumbo as a site of Pech occupation and, in contrast to the 1974
census, reported that 30 Pech inhabited the site (1977: 18). The study proceeded to list
other caseríos of aldea El Carbón without specifying the ethnicity of their inhabitants but
gave the impression that each was inhabited by Pech (1977: 18). The remaining caseríos
mentioned were El Pacayal, Laguna del Lago María, El Aguacatal, Guayabillas, and
Jocomico. Three of these were listed among the caseríos of El Carbón in the 1974
census but El Aguacatal and Laguna del Lago María were not listed under El Carbón or
its neighbors. A caserío Cerro El Aguacatal was recorded in aldea Conquire, the
neighboring aldea to the south, in 1988 census as a site consisting of one house and six
inhabitants but no mention of Laguna de Lago María has been found. Again, no
informants nor other sources have mentioned these two places as sites of Pech
occupation.

The study’s somewhat problematic listing of the caseríos of El Carbón provides
some scant evidence for Pech occupation of each of the 1974 census caseríos of the
aldea except for El Cangrejo and Ojo de Agua, of which no mention was made. Neither
was any mention made of the settlements of aldea Agua Blanca being occupied by Pech
but this omission could have resulted from the study’s focus upon the aldea of El
Carbón. Other evidence supporting the proposition that the majority of aldea El
Carbón’s associated population was still of indigenous origin in 1974 is seen, however,
in the study’s report on the status of road construction in the area and in statements
regarding the Pech authorities’ desires for the future of the aldea. The study reported
that the road then under construction from San Esteban to Trujillo had at that time
reached only as far as Coyolito (1977: 34). Coyolito first appeared in census documents in the 1988 census listings as a *caserío* of *aldea* Conquire, which neighbors El Carbón to the south, and is located along the road between the two *aldeas*. A local ladino informant reported that the settlement was only 6 or 7 years old in 1991 and that the ladino inhabitants had arrived there only after the road had been built about 10 years before. Coyolito is in the vicinity of the former Pech site of Las Guayabillas, which is one of the southernmost *caseríos* of *aldea* El Carbón and is now inhabited by ladinos. The road construction had advanced in 1977, therefore, only to the edge of the territory which had been dominated by the Pech since 1887. Although Pech informants reported that a few ladinos lived in the area prior to the opening of the road, the settlements they are said to have inhabited lie within El Carbón’s neighboring *aldeas*, the closest ones to the south being La Floresta and Conquire, which are to the southwest of Las Guayabillas. The study also reported that the Pech leaders in El Carbón expressed a desire to congregate the Pech of the outlying *caseríos* in or near the settlement of El Carbón and to have the *aldea*’s territory declared a *municipio* within which they could prevent the settlement of ladinos (1977: 24-25). The perceived possibility of creating a *municipio* from *aldea* El Carbón within which the Pech could retain political control further indicates that the *aldea* was still dominated by Pech inhabitants and perceived as a Pech region by the Pech themselves in 1977.

Information obtained from Pech informants in El Carbón in 1992 must also be considered in attempting to determine the distribution of Pech settlement sites in the mid-1970s. Unfortunately, the various informants from whom information was obtained did
not always agree exactly concerning the locations of some former Pech sites and the dates at which they were last occupied by the Pech. It is possible, nevertheless, to gain a general understanding of the earlier Pech situation from the totality of the reports. El Carbón informants affirmed the former Pech occupation of each of the sites mentioned by Conzemius and the sites listed within the *aldea* of El Carbón in the 1974 census as well as the sites of Casa Quemada, La Bolsa and El Portillo in *aldea* Agua Blanca. They also reported the former Pech occupation of several sites in or near northern *municipio* San Esteban that have not been previously mentioned by other authors. The sites of Las Flores and Corozal, to be distinguished from another Corozal site reported to have been in the immediate vicinity of El Carbón, are located in *aldea* Agua Blanca to the southwest of the *aldea* seat. The sites of Vallecito and La Guara lie along the Río Grande between the sites of Santa María and El Alazán that were reported by Conzemius. Each of these four places was reported to have been a former site of Pech occupation but the date of their abandonment was unknown. Since these sites were not reported by either Conzemius or Helbig it is assumed that they contained, at most, a small Pech population in 1919 and thereafter and no Pech inhabitants in 1974. The site of Vallecito was listed among the *caseríos* of *aldea* Río Abajo and that of Las Flores among the *caseríos* of *aldea* Agua Blanca in both the 1974 and 1988 censuses and the Agua Blanca *caserío* of El Corozo was reported in the 1988 census. La Guara was not included among the *caseríos* of northern *municipio* San Esteban nor of *aldea* Punta de Piedra in *municipio* Iriona, in which it is actually located, in either census although Pech informants reported that it is today inhabited by *ladinos*. The possibility certainly exists
that these sites could have contained Pech inhabitants into the middle decades of this century without being mentioned in any of the published studies on the Pech during that time. Nevertheless, without positive evidence of significant Pech occupation in 1974 of the four previously unreported settlement sites, they will be assumed to have been uninhabited or ladino-inhabited at the time of that census.

As stated above, El Carbón informants affirmed the former Pech occupation of each of the sites mentioned by Conzemius and within the aldea of El Carbón in the 1974 census as well as the sites of Casa Quemada, La Bolsa and El Portillo in aldea Agua Blanca. Of the thirteen 1974 census sites falling within a 12 kilometer radius of El Carbón, then, only the sites of Agua Blanca and El Guano, whose exact location remains uncertain, in aldea Agua Blanca remain unreported as sites of present or former Pech occupation. The populations of these two sites recorded by the census can, then, be assumed to have been ladino and not Pech. The ethnic character of the remainder of the 13 sites can be estimated from informants’ general and specific descriptions of the recent ethnic distributions in the region. The Pech of El Carbón clearly distinguish the status of Pech-ladino relations in the area before and after the construction of the unpaved automotive road through the aldea. Cálix et al. reported that road construction had advanced only as far as Coyolito in 1977 and residents of El Carbón reported dates of construction at that site ranging from 1978 to 1980. Descriptions of the status of ladino settlement in the area prior to the building of the road, then, can be taken to represent the situation at the time of the 1974 census. Although some informants reported movements of Pech from some of their farther-removed settlement sites to the south and
west toward El Carbón prior to the construction of the road, they generally agreed that there were relatively few ladinos, with whom they had good relations, in the area. The settlements of Conquire and La Floresta in aldea Conquire and Agua Blanca, Casa Quemada and El Portillo in aldea Agua Blanca were the closest sites of ladino occupation reported to the south and west, respectively. The identification of the later three settlements as ladino sites prior to the building of the road and the lack of any reports of El Guano as a former Pech site by informants leaves only the ethnicity of caserio of La Bolsa unaccounted for in aldea Agua Blanca in 1974. Because La Bolsa is the farthest west of all of the 1974 Agua Blanca settlements falling within the 12 kilometer radius, that is, because each of the other four Agua Blanca settlements already identified as ladino in 1974 lie between La Bolsa and El Carbón and because informants could not specify when La Bolsa had been abandoned by the Pech, it is safe to assume that the 1974 population recorded for this caserío, too, was ladino. Each of the populated places of aldea Agua Blanca that lie within the zone of solidly Pech caserios identified by Conzemius in 1919 can, therefore, be seen to have very likely been occupied by ladinos in 1974.

To the south, the settlements of Conquire and La Floresta lie outside of the 12 kilometer radius established as the most likely limit of Pech occupation and so it is no surprise that they were identified as already being ladino settlements prior to the opening of the road. Indeed, Conquire was identified by Conzemius as already being a ladino settlement in 1919 and over 83 percent of its recorded population in 1887 was classified as ladino. La Floresta was not mentioned by Conzemius but could possibly have been
represented by the 1887 census site of La Boca, whose population at the time was
classified as 100 percent ladino. As discussed elsewhere, however, the true location of
La Boca is uncertain and it could easily have been located elsewhere in municipio San
Esteban. Nevertheless, La Floresta was in 1974 the northernmost caserío of aldea
Conquire and it seems clear, therefore, that ladino dominated settlements then extended
at least to the limits of the territory of aldea El Carbón.

There is likewise little doubt that the 1974 populations recorded for aldea El
Carbon were almost exclusively Pech. Informants' reports of pre-road ladino sites being
located only outside of the aldea boundary and continued Pech concentration in the
vicinity of El Carbón itself make it unlikely that there was a significant ladino presence
within the heart of the aldea in 1974. Of the eight populated places listed in the census,
El Carbón, Agua Amarilla and La Laguna remain occupied by the Pech today and fall
within the provisional land guarantees issued to the Pech by Instituto Nacional Agrario in
1991. That another guaranteed Pech settlement, El Cumbo, recorded no population in
the 1974 census is unexplained but is most likely the result of either an outright omission
by the census or the consolidation of its data with that of the larger El Carbón. Two
sites to the northeast of El Carbón, the farthest in the aldea from the neighboring ladino
settlements, lie along the border of the provisionally titled lands and are today occupied
by ladinos. Such was probably not the case in 1974, however. Three houses of Pech
inhabitants, the same number recorded in the census, were reported to have left one of
these caseríos, El Cangrejo, about 1980. The other northeastern caserío, Ojo de Agua,
recorded only one house with five inhabitants in 1974. No date was provided by
informants for the abandonment of this site by the Pech but its location near caseríos El Cangrejo and San Pablo, which was not listed in the 1974 census but was sold by Pech occupants to ladinos about 1985, and the failure of informants to identify it as a site of ladino occupation prior to the opening of the road makes it reasonable to assume that Ojo de Agua was occupied by the Pech in 1974.

Two of the three southernmost caseríos of 1974 aldea El Carbón, El Pacayal, Jocomico and Las Guayabillas, were likewise never reported to have been sites of ladino occupation in pre-road times. Helbig reported the presence of three ladino ranchos at Jocomico in 1953 but it appears that these inhabitants had either left the site or intermarried with the local Pech population prior to 1974 (1965: 78). Each of the sites is today, however, occupied by ladinos with no remaining Pech inhabitants reported. Although an informant who was born in Guayabillas reported in 1992 that 30 to 40 Pech had left Guayabillas for El Carbón some 25 years before, he also specified that ladinos had only begun to arrive there about 15 years before; about the time that road construction had advanced into the area and several years after the 1974 census. It seems likely, therefore, that the 5 houses and 30 inhabitants recorded at Guayabillas in 1974 were remaining Pech occupants of the site, although no informant specified any date for a later exodus of Pech from Guayabillas. The caserío of Jocomico was reported as a site of Pech occupation in 1919 by Conzemius and as “un lugar, nada importante, habitado por peones ladinos . . . que in 1953 contaba sólo con 3 pobres ranchos” by Helbig (1928: 16, 1965: 78). Helbig’s reference is the only available indication of a ladino occupation of Jocomico prior to the construction of the road through the area.
The site recorded only one house with 15 inhabitants in the 1974 census and these appear to have been persons of Pech or mixed ladino and Pech heritage. Pech informants from El Carbón did not report Jocomico as either a site of recent Pech occupation or a site of ladino occupation prior to the opening of the road. Rather it was described as a site from which the Pech had moved years ago and where the recent Pech inhabitants of the nearby caserío of El Pacayal farmed. Araceli Matamoros et al.’s survey of the site in 1987-88, although probably incomplete, did not report any inhabitants with residence at Jocomico of longer than seven years. El Pacayal was not reported as a settlement site by Helbig but the site recorded three houses and thirty-three inhabitants in the 1974 census. Although its Pech inhabitants sold land there to ladinos in 1988 or 1989 and the last of the Pech were reported to have left the site in 1991, El Pacayal was included in the provisional guarantee of lands awarded by the Instituto Nacional Agrario in 1991 to La Laguna and El Pacayal. Contrary to the impression of neighboring ladino and Pech caseríos given by Helbig’s report and the 1974 census, and in agreement with informants’ accounts, the 1976 Pech census, and the migration histories collected by Araceli Matamoros et al., it appears that around 1974 the occupants of the El Pacayal-Jocomico area were considered by the Pech community around El Carbón to be inhabitants of a single location who, although some families were probably mixtures of Pech and ladino parents, were members of the larger Pech community. The mouths of the two streams upon which caseríos Jocomico and El Pacayal focus are spaced only about a kilometer apart along the Río Agua Amarilla and, given the rather dispersed settlement pattern common particularly in earlier years, the
prior known existence of Jocomico as an inhabited site, and the Pech practice of
maintaining a house or shelter near their fields, it is understandable that, while the Pech
considered the area’s inhabitants to be occupants of the single site of El Pacayal, census
takers could have classified the same inhabitants as occupants of two distinct sites. A
comparison of the 1974 data with a 1976 Pech census conducted by Pech leaders (Censo
Familiar 1976), shows that this is probably what happened in 1974 and that the apparent
contradiction between official and local accounts is, for once, explainable. Although the
Pech census did not record the place of residence of the population, because of the
common practice on Pech censuses of grouping the names of family members together
and because the names of the former heads of households in Pacayal were provided by
informants, the identification of commonalities in the recorded surnames among the
families can be used to estimate that the population recorded for El Pacayal on the 1976
census was 46 persons. This compares favorably with the combined figure of 48 persons
reported for caseríos Jocomico and El Pacayal in the 1974 census. Jocomico’s inclusion
in the 1974 national census while not being reported by informants as a site of recent
Pech occupation, then, can reasonably be assumed to have simply been the result of
differing toponymic classifications employed by the census bureau and the local
residents. The correspondence between the 1976 and 1974 counts also further supports
the proposition that both of these 1974 census caseríos were indeed populated by Pech.

Further evidence that the southerly caseríos of aldea El Carbón were populated
by Pech in 1974 is found in the 1988 study by Araceli Matamoros et al., although the
data from this source cannot be taken as sufficient or conclusive in and of itself. Araceli
Matamoros et al. collected land tenure and migration history from residents living primarily south of El Carbón, within what the authors considered to be Pech lands on the basis of Pech land titles from 1735 and 1862, to illustrate ladino infiltration into the Pech area from 1950 to 1988 (1988: 28-31, 55-69). The authors reported that in 1988 ladino informants claimed to possess a total of 589.5 hectares and to utilize an additional 258 hectares within the area which the authors identified as traditional Pech holdings (1988: 55-59). They then compared the total land reported as possessed by ladinos (589.5 hectares) with the total area of Pech-owned land of 3,151.954 hectares, which they reported to have come from an INA survey of March 1988, to claim that 18.71 percent of the Pech lands had been usurped by the ladinos (1988: 66-69). Unfortunately, the comparison appears spurious or incommensurable on several counts. While any documents regarding an actual 1988 survey of Pech lands near El Carbón were not found in the INA expediente in 1992, the official file does include the Acta de Reconocimiento de Limites y Linderos, conducted from February 29 to March 2 and on March 18, 1988 in preparation for the survey, as well as the Actas Generales de Mensura for surveys of the three communities that took place in April of 1989 (INA solicitud No. 21079: 55-96). These surveys delimited and demarcated the lands that were later provisionally guaranteed to the Pech of municipio San Esteban by the Instituto Nacional Agrario. The 1989 survey determined that the lands of El Carbón, El Cumbo, and La Laguna and El Pacayal contained at total of just over 3,122 ha rather than the 3,151.954 reported for the 1988 survey (INA solicitud No. 21079: 115). More importantly, however, is the fact that most of the land reported to be owned by ladinos is not located within the lands.
surveyed for the Pech in 1989. Of the nine settlements included in the authors' survey, only those of El Pacayal and Sangro fall within the Pech lands and that of El Portillo borders the Pech lands on the west. The claim that the 589.5 hectares of ladino-owned land reported to the authors represented 18.7 percent of the Pech' communal land is, therefore, geographically incongruous. Another incongruity is found in the authors' inclusion of several Pech families' lands in El Pacayal among the reported ladino holdings of that community. It is very likely that most of the ladino-owned lands reported by the authors were occupied only in recent decades and that, although the Pech held no legal title to these areas, they were, as is argued in this work, part of the larger Pech region even after 1974. The claim that these holdings accounted for almost 20 percent of the lands surveyed for the Pech in the late 1980s is, however, not substantiated.

In spite of these shortcomings in the Araceli Matamoros et al. study, the length of residence data which the authors collected for the settlements south of El Carbón provides evidence in support of the proposition that these sites were only recently occupied by ladinos. Since the authors presented data for a total of 399 individuals in 62 families, some of whom were actually Pech, and the 1988 census reported a total of over 600 residents in the same area, it is unlikely that the data presented represents all of the ladino families then occupying lands between the settlements El Carbón and Coyolito. Nevertheless, among the residents of the settlement sites in this region surveyed in the study, Guayabillas, Coyolito, El Portillo de Coyolito, Sangro, Campamento, Capuca, Jocomico, and El Pacayal, the authors reported only two families with origins outside of
the twentieth century Pech region, one in El Portillo de Coyolito and another in El Pacayal, whose length of residence predated 1980 (1988: 55-58). Further, the family of María A. Alonzo in El Pacayal, which the study reported to have originated San Esteban and to have lived in El Pacayal for 20 years, was probably ethnically Pech or mixed ladino-Pech. The surname Alonzo was recorded for six individuals in three families among the 46 individuals and five families believed to have been residents of El Pacayal at the time of the 1976 Pech census. One of the individuals listed on that census, Anastacia Alonso, may well have been the same María A. Alonzo interviewed by Araceli Matamoros et al. The inclusion of persons with the Alonzo surname in the Pech census suggests that the family was of at least mixed blood and, more importantly, that they were considered to be part of the Pech community. The only other residents of caseríos to the south of El Carbón for whom the study reported lengths of residence longer than 7 years were three families then in El Pacayal that are known to be Pech and which reported lengths of residence there of 25, 30, and 50 years. Among all of the respondents interviewed in the Araceli Matamoros et al. study, then, there is an indication of only one ladino family, that of María Angela Meza in El Portillo de Coyolito, a site near the border with aldea Conquire that was not listed in the 1974 census, living in the area between Coyolito and El Carbón prior to 1980.

Reconstruction of the Pech distribution within municipio San Esteban at the time of the 1974 census from field work and the 1977 and 1988 studies indicates, therefore, that each of the caseríos of aldea El Carbón can reasonably be assumed to have been heavily dominated, if not entirely inhabited by, populations of Pech individuals at the
time of the census. Likewise, there is no indication that any caserío of the neighboring aldeas of Agua Blanca and Conquire was inhabited primarily by the Pech in 1974. We can, therefore, take the census figure of 345 inhabitants in the settlements of aldea El Carbón as an approximation of the total Pech population within municipio San Esteban and the territory of aldea El Carbón as an approximation of the remaining Pech region within the municipio in 1974. This represents a reduction in the area identifiable as Pech from both the times of the 1887 census and of Conzemius’ work in 1919. According to this reconstruction, the territory around the caseríos of Casa Quemada, La Bolsa, and El Portillo to the west of El Carbón which were included among Conzemius’ Pech sites can be seen to have been lost to ladino control by the Pech between 1919 and 1974, and very probably, considering Helbig’s report that there were no settlement sites along the camino real between El Carbón and the Río Sico, between 1953 and 1974 (1965: 81).

The Pech population of northern municipio San Esteban, however, appears to have remained rather stable over that time as seen in the comparison of the 1974 figure of 345 persons with Conzemius’ estimate of about 300 Pech, the 1895 census’ report of 294 Pech, and the 1887 census’ total of 334 Indians for the entire municipio. The reports of Lunardi and Helbig indicate, however, that the Pech population of the municipio may have declined by the 1940s and 1950s to one-half or less of its level shortly before and after the turn of the century but, if so, it had rebounded to turn of the century levels by 1974.

Cálix et al. reported a total of 352 inhabitants in 40 houses “en el área de la aldea” from information obtained from the aldea official in charge of birth and death
registrations (1977: 16-17). These figures closely approximate the 1974 census data for the entire aldea of 345 persons and 46 houses and therefore probably also represented the total figures for El Carbón and its associated caseríos at the time. The study specified that two families of ladinos, a total of nine persons who had previously lived in the nearby mountains and who intended to leave El Carbón within two months of the time at which they were interviewed, lived in the center of El Carbón in 1977 (1977: 16). This would leave, at most, 343 Pech inhabitants of the aldea but, as previously noted, the study did not explicitly specify the ethnic composition of the outlying caseríos.

The final Pech population estimate from the mid-1970s to inform our discussion is the census of Pech individuals conducted by Pech leaders in December of 1976 (Censo Familiar 1976). The census counted a total of 339 Pech in El Carbón and its associated caseríos. Of the three available population estimates for the mid-1970s, the Pech census was the most targeted at specifically identifying Pech individuals and was conducted by those most knowledgeable about the local Pech situation. The population figures provided by the national census and the 1977 study also prove useful, however, once the high likelihood that entire aldea of El Carbón was dominated by Pech inhabitants at their respective times is established. They support, and strengthen our confidence in, the Pech census count. Together the three population counts converge to provide strong evidence that the total Pech population of municipio San Esteban was about 340 individuals. Bertrand Soto reported information provided to him by the alcaldía of San Esteban that showed the Pech population in El Carbón at the end of the decade to have been some 306 persons. This figure is low in comparison to the other available
indicators from the 1970s, as well as those of later decades, and was, therefore, probably based upon incomplete information.

The final period for which we will consider the status of Pech population and settlement distribution in northern municipio San Esteban dates to around the beginning of the final decade of the twentieth century. The national census of 1988, several Pech studies from the late 1980s, and data collected by the author in 1991-92 combine to provide an estimate of the Pech situation at that time. The 1988 census provides population counts of the caseríos of aldea El Carbón in that year but, because of the rapid settlement changes experienced in the aldea since the 1974 census, it is no longer possible to assume that every caserío was occupied primarily by the Pech, nor even that the majority of the aldea's population was of Pech descent. The data provided by field work and the studies conducted by Honduran scholars must be used to identify which caseríos reported by the 1988 census were still occupied by the Pech and to estimate the accuracy of the census count. Between these two most recent national censuses, two important counteracting forces affecting the stability of the Pech settlement patterns in the region began to operate. The construction of an unpaved but all season automotive road through the aldea in the late 1970s greatly increased the accessability of the area to ladinos from outside of the aldea. The opening of the road led directly to increased rates of in-migration and settlement of ladinos in lands that were once either occupied or utilized by the Pech or that were largely uninhabited and less intensely utilized but which served as a buffer between the Pech and ladino society and were available for more extensive land use activities such as hunting and fishing or the collection of liquidambar.
resin. Greater accessibility and increased in-migration operated to displace some Pech from settlement sites and intensively and extensively utilized lands on all sides of their local core and to further concentrate the Pech in the immediate vicinity of the settlement of El Carbón. In an effort to counteract the processes of displacement and land alienation, the Pech of municipio San Esteban began in the latter 1980s to reassert their ownership rights to the parcel titled to El Carbón in 1862 and to acquire legal recognition of their occupation of and rights to lands immediately north and south of the titled parcel in exchange for the 1862 Boca de la Montaña parcel from which they had already been displaced. Provisional guarantees to the lands of El Carbón, El Cumbo, and La Laguna and El Pacayal were issued by INA in August 1991. While not entirely successful as of 1992, these efforts operated to stem somewhat the flow of ladinos into the territory then most utilized by the Pech and to provide legal recourse in cases of unauthorized ladino entry into Pech lands. Through these efforts Pech displacement and alienation from their remaining lands was slowed although some conflicts with newcomers and prior ladino occupants of the provisionally guaranteed lands continued.

The 1988 census recorded a total of 18 populated places within aldea El Carbón compared to only 8 in the 1974 census. Unlike the situation in 1974, however, no case can be made that each of the aldea's caserios was in 1988 occupied entirely, or even predominantly, by Pech nor that the majority of the aldea's 1,315 enumerated population was Pech. Indeed, only the seven settlements of Santa María del Carbón, El Agua Amarilla, El Campo, El Cumbo, El Pacayal, El Tarral, and La Laguna, which reported a
combined population of 650 persons, are believed to have been inhabited either entirely or partially by Pech at the time of the census.

Perhaps the best indication of the maximum distribution of Pech settlement sites in the latter half of the 1980s is provided by the documents relating to the Pech' efforts to acquire legal recognition to their lands at the time. In April 1987 the Pech of El Carbón submitted a request to the Instituto Nacional Agrario for the remeasurement of the lands titled to them in 1862 to "conocer el área exacta y límites precisos del predio para de inmediato proceder al saneamiento del mismo" (INA solicitud 21079:1). In August 1987 the Instituto appointed Roberto Castellanos to oversee the Pech lands survey (INA solicitud 21079:30) and the Acta de Reconocimiento de Limites y Linderos of the Pech-occupied lands of El Carbón, El Cumbo, and La Laguna and El Pacayal was conducted in February and March of 1988 (INA solicitud 21079:55-67, 112-113). The actual instrument survey of the Pech lands was conducted in March and April of 1989 and the survey's maps and documents are included in the official record (INA solicitud 21079:71-96, 114).

That the territory identified as Pech in the 1988 reconocimiento and surveyed for them in 1989 by the Agrarian Commission included the 1862 parcel centered on El Carbón but not the 1862 parcel of Boca de la Montaña is a reflection of the changed Pech distribution since the old titles were issued and the fact that the Pech sought a new title which encompassed less than the entire aldea of El Carbón further reflects the changes in the aldea's ethnic settlement pattern since the 1974 census and the opening of the road around 1980. In the Memoria Descriptiva of its work in the El Carbón area,
the Agrarian Commission admitted its failure to remeasure the original Boca de la Montaña plot because “no haber conocedores de los linderos del mismo y por las condiciones de lluvia imperantes en dicho lugar” and proposed that the 1862 titles be annulled and that a new title encompassing the just-completed surveys be issued to the Pech (21079: 115). The Pech-occupied lands of El Cumbo and La Laguna and El Pacayal, to the north and south of El Carbón’s 1862 titled lands, respectively, were determined by the Agrarian Commission to be national lands inhabited and utilized almost exclusively by the Pech and were believed by the Commission to be equivalent in area to that of the 1862 Boca de la Montaña site (21079: 114-117). That the boundaries of the old Boca de la Montaña site were no longer known to the Pech in the 1980s indicates that they had neither occupied that site nor thought of it as part of their lands for some time. Conversely, the area surveyed as Pech lands in 1989 provides a clear indication of the territory which the Pech continued to occupy and utilize intensively at that time. The Agrarian Commission’s survey documents show that the Pech and their ladino neighbors agreed that the Commission’s delimitation included the lands then occupied and utilized almost exclusively by the Pech. In addition to the original parcel of El Carbón, the Pech in the latter 1980s sought to receive legal recognition of their occupied lands contiguous with the original parcel in return for their renunciation of the Boca de la Montaña site and the Agrarian Commission consulted both the Pech and the ladinos occupying neighboring lands to determine the boundaries between the Pech-occupied lands and the ladino-occupied lands. The resulting delimitation produced, therefore, an accurate estimation of the extent of Pech settlement and intensive land use
in 1989. The Pech also utilized lands outside of the Instituto Nacional Agrario survey
for more extensive activities such as hunting and fishing, gold prospecting, and
liquidambar resin collection but the surveyed lands delimited the zone of Pech
settlement concentration and more intensive land use.

Of the 18 places listed within aldea El Carbón in the 1988 census, nine fall within
the lands surveyed by INA—Santa María del Carbón, El Agua Amarilla, El Campo. El
Cumbo, El Pacayal, El Sangro, El Tarral, La Laguna, and San Pablo. None of the
remaining nine caseríos of the aldea were reported to have been occupied by Pech in the
late 1980s. Within the three guaranteed parcels, informants reported that the sites of El
Sangro and San Pablo were occupied by ladinos, El Pacayal was inhabited by both
ladino and Pech families and the residents of El Tarral were intermarried Pech and
ladinos at the time of the 1988 census. Aside from these sites, only a few ladinos who
were married to Pech spouses were reported to live within the other Pech settlements of
aldea El Carbón. The Carta Poder of April 1986, in which the Pech of municipio San
Esteban retained Lic. Armando Matute Fortin to represent them in legal matters before
the institutions of the Honduran government, specified the caseríos of El Cumbo, El
Pacayal, La Laguna, and Agua Amarilla as the constituent settlements of the “Tribu
PECH (PAYA), de la aldea el Carbón” (21079: 3-4). With the exception of El Pacayal,
which was abandoned by the Pech in early 1991, and the addition of El Campo and El
Tarral, these are the same Pech-occupied settlement sites reported by Pech informants in
1991-92. The importance of these sites to the Pech in the late 1980s is further evidenced
by the fact that El Carbón, El Cumbo, and La Laguna and El Pacayal were the
settlements whose lands were guaranteed to the Pech by INA in 1991. El Campo and Agua Amarilla fall within the boundaries of the El Carbón garantía and El Tarral within that of El Cumbo.

Roughly the same distribution of Pech settlement was described in the report of Jesús Lanza et al. on the basis of field work conducted in 1985 (1992: 11). They reported that the caseríos of the El Carbón area Pech region were La Laguna, El Cumbo, Agua Amarilla, San Pablo, and El Pacayal. The authors noted that one of the two permanently occupied houses then located in San Pablo was inhabited by ladinos and they mentioned no other ladino residents in these caseríos (1992: 18). Jesús Lanza et al., then, identified the four settlements whose names appear on the INA guarantees as well as Agua Amarilla and San Pablo, which was already in 1985 partially occupied by ladinos, that fall within the El Carbón guaranteed lands. They failed to mention the census sites within the guaranteed lands of El Tarral, El Campo and El Sangro, the latter for which Araceli Matamoros et al. listed only one family with five months of residence (1988: 55) but which informants reported had been occupied by ladinos for about eight years prior to 1992. It is unclear whether Jesús Lanza et al. neglected to mention Sangro because it had yet to be settled at the time of their research in 1985 or because their list of “caseríos periféricos que componen la región Pech en Santa María del Carbón” intended to report only Pech-occupied sites.

The preceding identification of the primary ethnic affiliation of the caseríos serves as the basis for estimating the Pech population of aldea El Carbón around 1990. Local residents provided estimations of the Pech population ranging from about 800 to
1,800 persons. The latter figure agrees with information provided by a representative from the Proyecto Desarrollo del Bosque Latifoliado, a joint project of the Corporación Hondureña de Desarrollo Forestal (COHDEFOR) and the Canadian International Development Agency which has established an Integrated Management Area at El Carbón, but it clearly overestimates the number of Pech in the area. Jesús Lanza et al. (1992: 11) reported a total Pech population of 491 for aldea El Carbón in 1985 and the 1988 census reported a total population of 1,315 persons for the aldea with 691 of them residing in the nine settlements located within the INA surveyed lands. The census enumerated a total of 594 persons residing in the six settlements identified as predominantly Pech, Santa María del Carbón, El Campo, El Agua Amarilla, El Cumbo, El Tarral, and La Laguna, and 97 in the three ladino or mixed settlements of El Pacayal, San Pablo, and El Sangro. The entire 41 inhabitants recorded at the latter two sites were probably ladinos by the time of the census but El Pacayal was apparently in the process of changing from a predominantly Pech to predominantly ladino settlement and the proportion of its 56 enumerated inhabitants that were Pech at the time is uncertain.

Araceli Matamoros et al. reported six ladino families with 53 members at El Pacayal from their visit on September 25, 1987 (1988: 51, 57). Four of those families, comprising 38 individuals, can be identified as either definitely or very probably Pech. The 1988 census recorded 10 houses and 56 individuals the following year and Jesús Lanza et al. reported only five houses at El Pacayal in 1985 but did not report a population figure for the settlement (1992: 19). A former Pech inhabitant of El Pacayal reported that by the time the remaining Pech left El Pacayal in 1991 there were nine
ladino houses and only three Pech houses on the site. She stated that a total of 14 Pech left the three homes there in April and May of 1991 and that three Pech women still remained in El Pacayal married to ladino husbands. According to her account, then, some mixed Pech and ladino families still live on the site. Most of the Pech interviewed in El Carbón, however, did not seem to recognize or be aware of the remaining Pech inhabitants and considered El Pacayal to be entirely inhabited by ladinos. Their view no doubt was influenced by the ongoing efforts to remove the ladinos there from the INA guaranteed lands to recover the site for Pech use and to prevent the entrance of even more outsiders into Pech lands. Although it is possible that the Pech women of El Pacayal and their offspring could be accepted as members of the Pech community upon resolution of the conflict, the position of the larger community that no Pech remained in El Pacayal after early 1991 will be adopted here for purposes of population and distribution analysis.

Data from the family health census of July 1991 in El Carbón showed seven houses and 44 individuals in El Pacayal. These data agree well with those of the 1988 census in light of the informant’s report of the loss of three houses and 14 persons between the times of the two counts, although less so with her estimate of twelve houses on the site in early 1991. The total population figures for El Pacayal of 53 in 1987, 56 in 1988, and 58 in 1991 obtained from Araceli Matamoros et al.’s 1988 report, the 1988 census, and 1991 data from informants and the health center census tend to mask what was apparently a rapid turnover in the actual residents of the site. The relative agreement between the three counts indicates somewhat of a balance between in-
migration, out-migration and natural increase at the site during the intervening four years but it fails to illuminate an apparently high magnitude of population movement through the site during the time period. The variance in the number of houses reported at the site—five in 1985, 10 in 1988, 12 in early 1991, and 7 in mid-1991—may be a better reflection of the dynamic demographic situation in El Pacayal during the latter 1980s and early 1990s than the total population figures. As many as 38 of the 53 inhabitants reported in 1987 have been identified as very likely to have been Pech, as described in the discussion of the Pech situation at the time of the 1974 census. Three of the Pech families, with a total of 31 individuals reported in 1987, were specifically reported to have moved by 1991 and it is likely that most of the remaining Pech had left as well. Nevertheless, the 1991 health center census still reported a population of 44 individuals at the site. The maintenance of a relatively high population level at the site in the face of the Pech exodus could, therefore, have only resulted from increases in the ladino component of the population via either in-migration or natural increase. It is not possible, however, to determine exactly what proportion of El Pacayal’s population was Pech at the time of the 1988 census. Informants in El Carbón reported that the Pech began to leave El Pacayal and the ladino component began to increase around 1988-89 and that the last 14 Pech (except for the three reported Pech wives) left in April and May of 1991. The documents of the INA Agrarian Commission indicate that the Pech still inhabited the site and were recognized as its owners during the time of its work there from February 1988 to April 1989 (INA solicitud 21079: 66-67, 112-114) although Araceli Matamoros et al. and local informants stated that some ladinos already inhabited
the site during that time. Without further data to clarify the situation at the time, we shall take the 38 residents of El Pacayal reported by Araceli Matamoros et al. in 1987 which have been identified as Pech from the 1976 Pech census and an informant’s account to be the number of Pech inhabitants at the time of the 1988 census and the remaining 18 residents recorded by the census will be considered to have been ladino. From all sources, then, the recent population history of El Pacayal can be estimated to have been 46 Pech and very few ladinos in 1976, 38 Pech and 15 ladinos in 1987, 38 Pech and 18 ladinos in 1988, and 0 Pech and 44 ladinos in 1991.

A total of 38 Pech in El Pacayal, when added to the 594 residents of the other predominantly Pech settlements, gives a total estimate of 632 Pech in aldea El Carbón at the time of the 1988 census. Data collected by the government-sponsored health center in El Carbón in July of 1991, however, reported a total population in the Pech settlements of 716 persons. The El Carbón centro de salud’s census documents included data on population and housing in settlements across the northern part of municipio San Esteban but, unfortunately, not every caserío in the zone was represented. It is believed, however, that all of the Pech of aldea El Carbón were included in the data for El Carbón, El Cumbo, Agua Amarilla, and La Laguna. No documents were found in the centro de salud for El Campo and El Tarral, but their data appear to have been included with the nearby Pech settlements of El Carbón and El Cumbo, respectively. El Pacayal had by mid-1991 been abandoned by the Pech.

Comparison of the 1991 and 1988 data show the greatest total population increase in the Pech settlements to have been in the combined El Carbón-El Campo site.
which grew by 113 persons or 26.4 percent of its 1988 population. Although, assuming that the data are accurate, this increase represented an 8.1 percent annual growth rate over the three year period, it is not surprising that the Pech population center with the largest initial population would grow the most rapidly via both natural increase and immigration from other Pech sites. Agua Amarilla had the largest percentage increase among El Carbón's Pech settlements, although its 32.4 percent growth was achieved through the addition of only 11 persons. The total populations of La Laguna and El Cumbo-El Tarral remained rather stable during this period but, given that each site registered six occupants less than two years old in 1991, there does appear to have been some population movement out of these sites.

The centro de salud's census included a breakdown of each settlement's population according to age categories and an examination of these figures for the four Pech settlements may prove useful in establishing the relative accuracy of the health center's data, at least in terms of its agreement with the data collected in the 1988 census. Of course, the uncertain number of Pech in El Pacayal and of ladinos in the other Pech settlements in aldea El Carbón in 1988, the unknown magnitude of Pech in- and out-migrations from and to other locations outside of the aldea, and the unknown number of deaths of individuals greater than two years old all introduce uncertainty into the analysis as possible sources of error. Nevertheless, the centro de salud data recorded a total population of 716 individuals in four locations which are believed to represent the six settlements of the 1988 census that remained inhabited by the Pech in 1991 and the age classified data can be used to subtract the population less than three years old from
this total to compare with the 1988 count. The 1991 documents reported a total for the
four Pech sites of 34 infants less than one year old, 26 children age 0 to 11 months, and
83 children 2 to 4 years old. The latter category was not broken down into finer detail
so, for purposes of this analysis, the total was divided by three under the assumption that
the 83 children were evenly distributed between the two, three, and four year old
categories. This provided a total of approximately 88 surviving Pech children born since
the 1988 census. When these 88 are added to the estimated 1988 Pech population of
632, the total of 720 Pech closely approximates the 716 persons enumerated in Pech
settlements by the 1991 health census. As cautioned above, however, the possibility of
erroneous counts in one or the other censuses remains because of the many unaccounted
for variables. For example, six of the Pech inhabitants of El Pacayal were reported to
have moved to locations outside of the aldea which were not included in the 1991 centro
de salud census.

Because the 1988 data were tabulated at the municipio level and no unpublished
settlement-level data classified by age groupings are available, it is not possible to further
compare the 1991 and 1988 enumerations of corresponding age cohorts. Comparison of
the proportion of the total population accounted for by each age category in the four
Pech locations in 1991 with those of municipio San Esteban as a whole in 1988 is
possible, however. The 1988 census provided population totals for every five year
cohort from age 5 to 74. The population less than five years of age was divided into
categories of less than one year old and from one year to four years old and the entire
population 75 years old and greater was included in a single category. The centro de
salud's data from 1991 classified the population according to the age categories of 0 to 11 months, 12 to 23 months, 2 to 4 years, 5-14 years, 15-49 years, and 50 years old and greater. The 1988 data can, therefore, be combined to match the age groupings of the 1991 data for a comparison of the relative contribution of each age category to the total population of the municipio in 1988 and the Pech settlements in 1991. Such a comparison reveals that children less than one year old accounted for 4.2 percent of the population of municipio San Esteban in 1988 and for 4.7 percent of the population of the Pech settlements in 1991. Children from one to four years of age were 15.8 percent of the municipio total and 15.2 percent of the Pech total. Persons from five to fourteen years of age constituted 32.2 percent and 33.5 percent of the municipio and Pech populations, respectively. Persons 15 to 49 years old accounted for 39.2 percent of the municipio and 43.3 percent of the Pech populations and those 50 years old or greater were 8.6 percent and 3.2 percent of the respective populations.

The relative agreement between the 1991 and 1988 data sets in terms of both their estimates of the total Pech population in aldea El Carbón and the age distribution in the entire municipio's population structure and that of its Pech settlements subset attest to the relative accuracy of each enumeration effort although some errors must undoubtedly have been made in each. The 1991 data is known to be incomplete for the entire aldea but this comparison shows it to be very consistent with the data collected in 1988 for at least the Pech settlements of El Carbón. Comparison with the municipio level data also improves our confidence in the 1991 data's indication of a seemingly high rate of natural increase in the Pech settlements. The population structure of the Pech
region, particularly in its youngest cohorts, is shown to be not very different from that of the municipio as a whole.

As compiled from these sources, the Pech population of municipio San Esteban, while being concentrated in an increasingly smaller area, numerically appears to have grown significantly over the last 100 years or so from 334 at the time of the 1887 census to 632 at the time of the 1988 census and 716 by 1991 (Figure 43). Almost all of this Pech population growth can be seen to have occurred, however, in recent decades. Indeed, if this reconstructed population history can be taken as largely correct, the Pech population of municipio San Esteban remained practically unchanged for most of the period, although there was perhaps some downward fluctuation from the 1930s through the 1950s, having grown only to 345 by 1974. Over the 104 year time span from 1887 to 1991, the increase from 334 to 716 Pech individuals equates to an average annual growth rate of only 0.7 percent. The San Esteban Pech average annual growth rate from 1974 to 1991, however, was 4.4 percent. In spite of their more recent rapid growth, however, the Pech have not keep pace with the municipio's nor the aldea's rate of ladino population growth. Municipio San Esteban's total population grew at an average annual rate of 1.97 percent from 1887 to 1988, and of 4.96 percent from 1974 to 1988 and the non-Pech component of its population, calculated by subtracting the estimated Pech population from the municipio total, grew at rates of 2.1 percent and 5.0 percent over the same periods. Aldea El Carbón's total population's average annual growth rate from 1974 to 1988 was higher still at 8.2 percent. The differential rates of growth, in large measure a result of ladino in-migration, have resulted in a drop in the Pech'
Figure 43. Population history of municipio San Esteban.
proportion in the total population of the municipio from 18 percent in 1887 to 5.56 percent in 1974 and to 4.5 percent by 1988 and within aldea El Carbón from practically 100 percent in 1974 to 48.1 percent in 1988.

**Pech Communities Outside the Core: Silín and Las Mariás (Río Plátano)**

Outside of the two Olancho municipios which have contained the bulk of the Pech population and have comprised the core of the Pech region during the latter half of the nineteenth century and throughout the twentieth century, some Pech occupation has been reported since 1887 in several sites to the north and northeast in what are today the municipios of Trujillo and Iriona in Colón department and Brus Laguna in Gracias a Dios department (Figure 44). Today the only significant concentrations of Pech remaining outside of Olancho are found in the communities of Silín in municipio Trujillo and Las Mariás in municipio Brus Laguna. The other reported sites, which lie primarily along the Sico, Paulaya, and Plátano rivers, no longer contain Pech inhabitants.

The documents of the 1895 Indian census of Honduras studied by Davidson identified four sites with significant Pech populations in the peripheral, outlying portions of the Pech region. This census reported forty-seven Paya inhabitants in Pusquirá, sixteen in Río Paya, fourteen in Semmica, and eighty-four total occupants in Plantain River, which was described as then inhabited by both Zambo and Paya persons. The census did not specify what proportion of Plantain River’s population was of Paya, as opposed to Zambo, origins, but because that site was not mentioned by other sources as a Pech settlement, it is assumed that most, if not all, of Plantain River’s inhabitants were Zambos. The 1895 census, therefore, reported a total of seventy-seven Pech in the three...
Figure 44. Settlement locations of the Pech periphery.
sites inhabited exclusively by Pech and the total Pech population enumerated in all four sites probably did not exceed ninety persons.

Sapper's report from 1898 apparently relied upon information supplied by Gregorio Duarte, the school teacher in Culmi at the time of his visit, for population estimates of the Pech settlements of Mosquitia that Sapper did not visit. The German explorer reported that about thirty Paya then lived in each of the three sites of Río Alazán, Guarascá, and Paulaya (Conzemius 1928: 10; Sapper 1899). While Sapper's reported total peripheral Pech population of ninety persons corresponds well with that of the 1895 census, it must be remembered that he was relying upon information from an informant who may not have had any more first-hand experience with those sites than did Sapper himself and that the specific sites reported by Sapper differed somewhat from those of the 1895 census. The Río Alazán site was not included in the 1895 census and Conzemius noted that it was a mining site that had long been exploited by North Americans and ladinos and whose former Pech occupants had abandoned the site for the vicinity of El Carbón by 1919 (1928: 9, 10, 16). Conzemius also noted that Guarascá was the name by which the Pech referred to the Río Plátano. As such, Sapper's report could refer to either or both of the two Pech settlements reported along that river by the 1895 census; Semnica and Pusquira. Place names on modern maps as well as current usage by the inhabitants of municipio Culmi commonly associate the name of Guarascá only with portions of the headwaters of the Río Plátano about as far as the confluence with the Río Chilmeca, below which the name Río Plátano takes precedence (see also RRNN Plan de Manejo 1984: 9). Sapper's population estimate for Guarascá
corresponds well with neither of the Río Plátano Pech populations reported by the 1895 census but it can be assumed that his informant was referring to the Pech settlement on the Río Chilmeca, at whose mouth the Río Guarascá takes on the name Río Plátano. Conzemius reported this site as Chalmeca and noted that the Mosquito had corrupted the pronunciation to Silmica (1928: 19). He described the site’s location to be on the Río Plátano near the mouth of the Río Chilmeca and further noted that the Pech had moved from that site to Pusquira “hace unos 25 años” which would have been around the time of Sapper’s travels to Culmí (1928: 19). Although the site was not occupied at the time of his trip up the Río Plátano, Helbig reported that the Sirimica, Silmika, or Tjirimica was also known as “Río de Los Payas, en recuerdo a viejas poblaciones de estos en el sector superior del mismo” (1965: 189). His maps of eastern Honduras included another variant of the name—Cr. Sirimika. Sapper himself included the settlement of Silmeca along the Río Plátano on his maps published in 1901 but its plotted location was closer to that of Pusquira than to the mouth of Río Chilmeca. It can be seen that at variety of spellings and pronunciations have been employed since 1895 to refer to what was probably the same site of Pech occupation somewhere along the Río Chilmeca. It seems clear, also, that the Pech inhabited Chilmeca until at least near the turn of the century before abandoning the site for the lower Río Plátano. It is less certain, but somewhat likely, that Sapper referred specifically to Chilmeca as the site of Pech occupation called Guarascá. The final peripheral Pech site reported by Sapper, Paulaya, is likewise ambiguous since it could refer to Pech inhabitants along the entire course of that river. Both the 1895 census and Conzemius, however, reported only one Pech settlement along
the Río Paulaya and it is likely that this is the site to which Sapper’s informant referred. The site, which Conzemius described as located about one kilometer up the Río Paya from its mouth on the Río Paulaya, was reported as Río Paya in the 1895 census and as El Payal by Conzemius (1928: 17). Sapper’s reported population for the site was again somewhat higher than the sixteen Paya enumerated by the 1895 census but exactly the same as the thirty Pech inhabitants counted by Conzemius there in 1921 (1928: 17).

Conzemius’ account of Pech population and distribution in the periphery of the Pech region around 1920 mentioned each of the five sites identified by the 1895 census and Sapper except for Plantain River. By the time of his stay in the region from 1919 to 1921 the peripheral sites of Río Alazán and Chalmeca were specifically reported to have been abandoned by the Pech. His failure to mention any Pech inhabitants at the mouth of the Río Plátano while specifying that the site was occupied by Mosquito Indians also indicates that this site was very likely also devoid of any significant Pech population by that time. Conzemius’ account of the lower Río Plátano Pech’ propensity to marry neighboring Mosquitos and raise their children in the Mosquito settlements indicates, of course, that some individuals of Pech heritage could have been living in the Mosquito settlement at the mouth of the Río Plátano but the site was clearly reported to be dominated by Mosquitos. The only Pech-dominated settlements in Mosquitia that were reported to still be occupied during Conzemius’ time in the region, then, were El Payal, near the confluence of the Ríos Paya and Paulaya, and Puskira or Pusquira, located inland on the lower reaches of the Río Plátano (1928: 10, 17-20).
As noted above, El Payal was located on the Río Paya, about one kilometer above its mouth in the Río Paulaya. The modern aldea seat of Paya, now inhabited exclusively by ladinos, still exists on the site today. Conzemius counted a total of six houses in El Payal in 1921, one of which was occupied by a ladino family and five by the Pech (1928: 17). He further reported that a total of thirty Pech inhabited the five Pech-occupied houses of El Payal at the time.

Puskira’s location on Río Plátano was described by Conzemius as being no more than fifteen kilometers in a straight line and from forty to forty-five river kilometers from the mouth of the river (1928: 19). The two reported measurements do not, however, correspond to the same point along the river’s course as measured from modern topographic maps and, because no inhabited site named Puskira remains along the river, this leaves the former location of the Pech settlement of Puskira open to question. A straight line distance of fifteen kilometers from the mouth would place the only reported site of Pech occupation at that time within the area referred to by Helbig as Las Marías, which then included the caseríos of Las Marías, Mangro, and Pishma, and by Herlihy and Leake as Las Marías Vieja, rather than at the modern site of the guaranteed Pech lands of community Las Marías, some ten kilometers farther upstream in a straight line (Helbig 1965: 157; Herlihy and Leake map 1992). The Instituto Geográfico Nacional 1:50,000 scale topographic map of this area includes the small settlement of Paskuala at the site identified by Helbig and Herlihy and Leake as Las Marías or Las Marías Vieja which could represent a corrupted version of the old name of Pusquira or Puskira as reported by Conzemius. The site of Las Marías Vieja is, however, only about twenty-
nine and a half kilometers along the actual course of the river from the coast rather than the forty to forty-five kilometers specified by Conzemius. The zone containing the modern sites of Baltiltuk and Las Marías, which is the area of greatest Pech concentration along the Río Plátano today as well as in 1953, is located some twenty-seven and a half kilometers in a straight line from the river mouth and the two sites are about forty-nine and forty-seven river kilometers, respectively, from the mouth. The area is, therefore, only a little beyond the range of river kilometer distances specified by Conzemius but well beyond his stated straight line distance from the mouth. One place along the Río Plátano was identified by this researcher’s guides with the name Puskira, but the site was not known to have ever been inhabited. It was located a few kilometers downstream from the settlements at Las Marías and Pujulak and within the community’s guaranteed land parcel. In spite of the lack of knowledge of a former occupation of this site, it seems most reasonable that the early twentieth century Pech settlement of Puskira was probably located in the vicinity of the remnant Pech population’s current settlements, the only area where the place name Puskira, albeit not as a settlement name, persists. At least one of the distances from the river mouth for the settlement reported by Conzemius, the small Pech population in Pishma reported by Helbig, and the apparent transfer of the name Las Marías to the current Pech zone from Las Marías Vieja during the second half of this century, however, all provide indications that the Pech of Puskira may have occupied a site somewhat farther downstream during the early decades of the century.
In Puskira, Conzemius counted a total of eight houses inhabited by forty-five persons (1928: 19). Two of these individuals were reported to be ladinos and two others were Mosquitos, leaving a total of forty-one Pech inhabitants at the site. Conzemius noted, however, that since the last Pech inhabitants of Chalmeca, which was located much farther inland and upriver on the Río Plátano from Puskira, had abandoned that site for Puskira some twenty-five years before, the Pech of Puskira no longer maintained contact with the Pech of Olancho or El Payal. Rather, their interactions were limited to contacts with the Mosquito occupants of the Río Plátano mouth and the surrounding region. Although he noted that the Puskira Pech resented the periodic incursions of Mosquitos upriver to the vicinity of Puskira for hunting and fishing, Conzemius also stated that the Pech intermarried frequently with the Mosquitos and that the offspring of the mixed marriages were usually raised outside of Puskira and considered themselves to be Mosquito rather than Pech. The loss of the younger generation's Pech identity through intermarriage as well as the prevalence of other cross-cultural contacts evidenced by the acquired ability of most of the Puskira Pech to speak both Mosquito and Spanish led Conzemius to predict that the Pech would shortly be completely absorbed into the dominant Mosquito culture of the surrounding coastal lowlands.

By 1953, Helbig could report the existence of very few Pech inhabitants in the periphery of the Pech region. While the specific locations of peripheral Pech habitations varied slightly from those reported by Conzemius and before, they were still confined exclusively to the lower valleys of the Ríos Paulaya and Plátano. He reported a total of
only thirty Pech among the estimated 800 inhabitants in the populated section of the lower Río Paulaya extending from Las Mangas to its confluence with the Río Sico (1965: 194, 196). Helbig located those Pech at either extreme of this settlement zone noting that they were dispersed in the vicinities of Sico, on the Río Sico some five kilometers upstream in a straight line from the mouth of the Río Paulaya, and Barranco, which was toward the upstream end of the Paulaya Valley’s occupied area. Each of these areas, although Sico was not mentioned by other published sources as a Pech site, was apparently formerly dominated by Pech occupants but, by Helbig’s time, their population was primarily ladino. Helbig reported that Sico was founded in 1925 as the principal station of the Tela Railroad Company’s banana operations in the Paulaya Valley (1965: 193-194). At that time, the only other settlement in the area was that of La Cirila, which was composed of “6 a 7 chozas habitadas por nativos” and which, in 1953, had been long abandoned (1965: 194). In contradiction to this report, Conzemius had specifically identified La Cirila as a ladino caserío on the Río Sico in 1921 (1928: 17). Two Pech informants, however, one currently living in Dulce Nombre de Culmí and the other in caserío El Campo of community El Carbón, reported that they were born in Sico and had moved to the area of their current residence in their youth. These informants were born about 1923 and 1952, respectively, and the latter reported that he left Sico about 1965. These accounts indicate that the Sico-Cirila area was at least partly inhabited by Pech during the time of both Conzemius’ and Helbig’s travels to the area. Helbig did not state how many Pech may have been among the 100 inhabitants of Sico in 1953 nor how many occupied the southern portion of the settlement zone but he did
specify that only two houses in the vicinity of Barranco, the lone house at La Ceiba and one of the three houses at Las Mangas, were occupied by Pech (1965: 196, 235). The identification of these two sites place the Pech even farther toward the southern extreme of settlement along the lower Río Paulaya than Helbig indicated when locating them more generally in the vicinity of Barranco. Indeed, Las Mangas was described as the last inhabited site encountered when traveling upstream along the Paulaya until one reached the Pech caserío of Pucuyo at the edge of the Culmi settlement zone (1965: 195). Unlike Las Mangas, the site of La Ceiba appears neither on Helbig’s own maps nor modern maps of the area. Helbig’s route maps and his listing of settlement sites along the river, however, indicate that the Pech house at La Ceiba was located between the sites of Paya and Las Mangas along a trail which follows a tributary of the Río Paya, the Río de la Rica, over most of the distance. The two Pech houses, then, were located within about seven kilometers to the south of, and up the Paulaya Valley from, the site of Paya, which Conzemius, the 1895 census and, possibly, Sapper, had reported to be inhabited by Pech. Helbig reported the presence of three houses in Paya in 1953 but failed to specify any Pech occupation of the site. It seems, then, that in 1953 the Pech of Río Paya were in the process of abandoning the area for other places and as much is indicated by Helbig’s report that two Pech families that he met in Baltiltuk, on the lower Río Plátano, had moved there from the Río Paulaya (1965: 192).

On the Río Plátano, Helbig found only forty Pech, which he enumerated as fifteen men, fourteen women, and some children, living in the settlements at Baltiltuk, Puhulak, and Pishma (1965: 192, 235). These Pech were part of a total population along the river
of about 350 persons, half of which lived on the coast at the river’s mouth in the Misquito settlement of Plantain River, or Ras (1965: 157). The remainder of the Río Plátano’s inhabitants, Misquitos, Pech, and one house of ladinos, lived upriver in isolated houses or small settlements as far as Baltiltuk, beyond which were no permanently occupied sites (1965: 157-158, 185). Helbig noted that Pech-occupied Pishma was one of three caseríos, in addition to Las Marias and Mangro, that comprised an area along the river then known as Las Marias. This area should not be confused, however, with the modern site known as Las Marias which is located only two kilometers downstream from Baltiltuk and some 10 kilometers in a straight line upriver from Helbig’s Las Marias area. Herlihy’s and Leake’s 1992 map of Indian lands in Mosquitia identified the only settlement in the Pishma, Mangro, Las Marias area as Las Marias Vieja and the IGN’s 1:50,000 scale topographic map includes the place names of Simote, Paskuala, Lavapone, Los Mangos, and Isla de Pishma in the same area. Helbig reported in his text that the three sites together held only ten houses, but indicated on his detailed map of the Río Plátano region that they contained a total of fifteen houses, three of which were in Pishma (1965: 157, mapa 9). Pishma was the only site in Las Marias for which Helbig mentioned any Pech occupation but nowhere did he specify that all three of Pishma’s houses were inhabited by Pech. Along the remainder of the inhabited section of the Río Plátano upstream from Las Marias, Helbig reported the presence of only fifteen houses in the text and seventeen on his map (1965: 157-158: mapa 9). He noted that about half of the occupants of these houses were Pech and the other half Misquito, with the single house in Tiro being owned by a ladino. Besides the house at
Tiro, the upstream section of occupation included two Misquito houses at Canales, three Pech houses at Puhulak, and the settlement of Baltiltuk. Helbig did not detail the population of aldea Baltiltuk but his map indicated that it was the site of some eleven houses and his statement that the houses above Las Mariás were about equally occupied by Pech and Mosquitos implies that Baltiltuk itself must have been inhabited by both Pech and Misquito families. Helbig’s report from the Río Plátano, then, can reasonably be interpreted to indicate that, of the estimated 350 inhabitants of the river’s course, about forty were Pech living in perhaps three houses in Pishma, three houses in Puhulak, and about five houses in Baltiltuk. The aldea of Baltiltuk was very likely occupied by both Pech and Mosquitos, and perhaps the caserio of Pishma as well. Even if Pishma was not itself occupied by Misquitos, both it and Puhulak were in close proximity to other sites of Mosquito settlement. The Pech’ minority status in this region led Helbig to a similarly pessimistic conclusion as that reached by Conzemius regarding the probability of their cultural survival in this portion of the Pech periphery (1965:192). Both Conzemius and Helbig provided evidence, however, that the Pech population and culture on the Río Plátano was being maintained in part by in-migrations of Pech from more westerly portions of the Pech region and a similar renewal of Pech blood and culture in the region was again effected via migration in the early 1990s.

Since Helbig’s report from the middle of the century the Río Paulaya Valley appears to have lost entirely its Pech population while the Río Plátano Valley has retained a small number of pure-blooded Pech, primarily the result of a recent migration from Olancho, as well as persons of partial Pech heritage and a portion of its territory
was guaranteed to the Pech community of Las Marias by the Instituto Nacional Agrario. Pech utilization of some of the Paulaya Valley continues in the form of *liquidámbar* resin collection in some of its tributary valleys in the Sierra Río Tinto, which forms the western wall of the middle and lower sections of the valley, and the cultivation of fields within the portion of Subirana’s guaranteed lands that fall within the valley’s extreme upper reaches. All permanent Pech occupation of the former sites near Sico, Río Paya, and Pucuyo, however, appears to have disappeared during the second half of the century. No informants reported any current Pech occupation of any site within the Paulaya Valley and a six day journey down the length of the Paulaya river in December 1992 and January 1993 by three members of the Department of Geography and Anthropology at Louisiana State University, including this researcher, did not discover any sites of unreported Pech occupation. The Pech abandonment of Pucuyo, on the upper Paulaya within *municipio* Culmi, as discussed above, as a site of permanent occupation is believed to have occurred during the early or middle 1960s. It is not known how long the two houses of Pech reported by Helbig along the middle course of the Paulaya may have remained after his time in the region but their eventual abandonment must have marked the end of any permanent Pech presence in that area. The current ladino inhabitants of Limeta, Limón, which is one day’s walk above Paya, and Paya reported that there were no Pech inhabitants in their respective settlements and did not identify any other sites of Pech occupation anywhere along the river. The inhabitants of Las Mangas, one of the two sites of Pech occupation reported along the middle course of the river by Helbig, reported that they had moved to the site from Juticalpa about twenty
years before. Helbig had reported that only one of the three houses at the site was occupied by Pech in 1953, indicating that ladino occupation of the site predates even the twenty years specified by this researcher’s informants. Any significant Pech presence in the lower Paulaya Valley also appears to have disappeared. Although the town of Sico was never visited by this researcher, Pech informants from the core settlements of the Pech region never mentioned Sico or any other site in its vicinity as a current locus of Pech population. In concurrence with Helbig’s report, however, two informants from the Pech core did provide evidence of a former Pech occupation of Sico in the form of their reported births at the site. One informant, the head of the last remaining Pech household in the town of Dulce Nombre de Culmí, reported that he was born in Sico and had moved to Culmí when he was young. This informant’s age was reported to be fifty-three years by the Pech census of 1976, which places his birth at Sico in about 1923. This, of course, contradicts Conzemius’ report that La Cirila, the only site reported in the vicinity of Sico at the time of his research, was then a ladino caserío, but supports Helbig’s contention that La Cirila was, prior to the establishment of Sico in 1925, inhabited by “nativos” (1928: 17; 1965: 194). The second informant, a 40 year old Pech resident of caserío El Campo near El Carbón, reported that he was born in Sico and that he had moved to El Carbón when he was 13 years old. He further claimed that all of the remaining Pech inhabitants of Sico left that settlement at approximately the same time. He did not specify how many Pech remained in Sico at the time of their exodus nor how many ladino residents lived there at the time. His information, however, indicates a continued Pech occupation of Sico from about 1952 to 1965 and, further, places the last
Pech presence in Sico at about 1965. These credible accounts of former Pech occupation on the lower Río Grande, then, establish that area as a site of Pech occupation, albeit probably as a minority, into the latter half of this century, but also indicate that none of the 734 inhabitants enumerated within the aldea of Sico by the 1974 census were likely to have been Pech.

In contrast to the current situation in the Río Paulaya Valley, the Río Plátano Valley portion of the Pech periphery has retained some Pech identity into the present. The Pech population of the region, members of community Las Marias which is located at the extreme upstream end of settlement along the Río Plátano, is sufficiently viable to have been among the nine Pech communities in all of Honduras that were awarded guarantees of possession to their lands by the Instituto Nacional Agrario in 1991 in spite of the fact that many of its members are of mixed Pech and Miskito heritage. The Pech component of this population was bolstered by the recent migration of some forty to forty-five Pech from municipio Culmi in Olancho to community Las Marias but this additional Pech influence in the region was apparently not a factor in the decision of the INA to recognize Las Marias as a zone of traditional Pech occupation. Documents from the INA’s file on Las Marias’ application for title to its lands show that the decision was made to grant the community a guarantee of possession as early as November of 1989, prior to the reported 1990 departure date of the Olancho Pech from their home in caserio El Naranjo of community Vallecito (INA solicitud 22999: 9-11). The INA’s decision notwithstanding, community Las Marias’ lands were reported to have been inhabited by significant numbers of Miskitos since at least 1953 (Helbig 1965: 157-158).
As early as 1921 Conzemius reported that the Pech settlement at Puskira, which may or may not have been within the recently guaranteed parcel, contained two Miskitos and two ladinos among its forty-five inhabitants, that many more Miskitos traveled upriver to the vicinity of Puskira during the dry season and lived in temporary shelters while they hunted, gathered, and fished in the area, and that the Pech even then intermarried freely with the Miskitos (1928:19-20). Helbig reported only forty Pech inhabitants among the estimated 175 persons living along the Río Plátano above its mouth, outside of Plantain River or Ras, in 1953 (1965: 157, 235). Most of the Pech were then reported to live within the area recently guaranteed by the INA but one site located downstream from the guaranteed area, Pishma, was also determined to contain Pech inhabitants. Helbig further noted, however, that the fifteen to seventeen houses then located within today’s guaranteed parcel were inhabited about equally by Miskito and Pech occupants and that the single house at Tiro, the mouth of which stream demarcates the downstream limit of the guarantee, was owned by a ladino (1965: 157-158). These reports indicate, then, that the Pech population of Río Plátano was even early in the century at least partially integrated with non-Pech persons and, more explicitly, that the area occupied by the Pech community of Las Marías today by mid-century contained a substantial number of mixed heritage and non-Pech persons.

Since mid-century, the Pech of Río Plátano have continued to intermingle with non-Pech locals to the point where, particularly prior to the Olanchano Pech migration, a very small percentage of the area’s population was considered to be of relatively pure Pech heritage. The biological and cultural miscegenation in the region has contributed to
considerable variation in recent reports of the number of Pech inhabiting the banks of the Río Plátano. The 1974 census recorded a total population for aldea Las Marias, which then included all settlement upstream of Pishma, of 264 persons in forty-two houses. The 1988 census reported only 210 total inhabitants in fifty-two houses within the aldea, which at that time was delimited to also include the caserío of Pishma. Pishma’s incorporation into aldea Las Marias between 1974 and 1988 had no effect upon the reported population totals, however, as the 1988 census enumerated six houses but no population at the site. In fact, only six of the aldea’s nine caserios recorded populations at the time, with seventy-six inhabitants reported in Las Marias, 102 in Batiltuk, fourteen in Bulevar, seven in Kiajkimina, two in Tiro, and nine in Bulit. Of course, only a portion of the aldea’s population at the time of either census can be assumed to have been of even partial Pech heritage and the number of pure Pech would have been smaller still.

The variation seen in reports of Pech population on the Río Plátano since 1974 is likely a result of both the use of differing criteria to define who is considered to be Pech in the heavily mixed population and the limited or complete lack of first hand experience in the region on the part of the writers. Holt’s (1974) informants from municipio Culmí reported to him that some forty to fifty Pech who were intermixed with Miskitos lived on the Río Plátano in 1974. Several later reports apparently relied upon information gathered the Honduran Secretaría de Recursos Naturales’ Dirección General de Recursos Naturales Renovables for their accounts of the Río Plátano Pech population. The 1984 summary version of the Dirección General de Recursos Naturales Renovables’ management plan for the Río Plátano Biosphere Reserve did not include a specific...
estimate of the Pech population in the reserve but it placed their relative proportion at only 0.5 percent of the total population within the reserve and identified only the settlement of Batiltuk as a site retaining aspects of traditional Pech culture such as the use of stone manos and metates for grinding corn and cooking in clay pots (1984: 20). The document nevertheless reported that the Batiltuk Pech spoke Miskito predominantly, indicating a significant cultural mixing at the site. Another Dirección General de Recursos Naturales Renovables source from 1980 examined by Davidson indicated variously that Batiltuk, with a population of thirty to fifty persons in fourteen families, was the only Pech settlement on the Río Plátano, but also that Las Marias (Guapinyari) and a few isolated sites between settlements may have contained Pech inhabitants and that there remained in 1979 only seventeen pure Pech on the Río Plátano who were described as elderly and who primarily spoke the Miskito language. This source also contained population counts for settlements in the northern, coastal end of the reserve that enumerated one Pech individual among the 471 inhabitants of Plaplaya, six persons of mixed Pech and Miskito heritage among the eighty-one inhabitants of Kuri, thirty Pech, twenty-one Miskito, nineteen mixed persons, and one ladino in Las Marias, and twenty-four Pech and twenty-seven Miskito in Batiltuk.

Bertrand Soto (1979: 35-36) credited the Ministerio de Recursos Naturales as the source for his report of 100 Pech in Batiltuk, a figure which, although it does not correspond exactly with any of the data from that branch of the government available to this researcher, must certainly have been intended to include persons of less than pure Pech heritage. Two other sources also appear to have utilized the Dirección General de
Recursos Naturales' (RRNN) data to report a smaller Pech presence in the region. Two former RRNN staff members noted in their article on the Río Plátano Biosphere Reserve that the only remaining pure Pech among "the 500 or so human residents" of the reserve inhabited "the innermost villages" and consisted "of about 17 individuals [who were] mostly of advanced age and seem[ed] to be heading towards cultural extinction" (Glick and Betancourt 1983: 171). Former Peace Corps worker Leon Kolankiewicz (1989: 35) relayed information from an unspecified 1982 report, which must also have either been produced by the RRNN or based upon its data, that Kolankiewicz claimed to have stated that only seventeen "genetically pure" Pech, who were "all living along the banks of the Río Plátano in the Department of Gracias a Dios," remained in all of Honduras.

Jesús Lanza et al. (1992: 11), like Bertrand Soto, apparently used a less restrictive definition of Pech indigenousness to report a total of 140 Pech living in "Baltituk o (Ciudad Paya) Las Marías" in 1985. Although the authors stated that they visited the Pech region on the Río Plátano during the course of their research, their work provides no information on the Río Plátano Pech beyond the population estimate and it is not clear, therefore, how they arrived at the figure of 140 persons.

In their early 1990s overview of the cultural traditions present within the Biosphere Reserve, based upon several months of geographical and anthropological research in the region, Herlihy and Herlihy ([1991]) did not attempt to discern the number of local inhabitants that may have been of partial Pech ancestry. They reported simply that the majority of the reserve's Pech inhabitants lived in the settlements of Las Marías, Pujulak, Baltituk, and Waiknatara and that "De los 250 individuos en la región.
sólo 24 se considera “puro” cuya herencia se remonta a los asentamientos históricos en las cabeceras del Río Plátano” ([1991]: 11). The twenty-four pure Pech reported by Herlihy and Herlihy did not, of course, include the recent arrivals from Olancho, some thirty of whom they reported to inhabit the only four houses then in Waiknatara. The recent addition of some forty-odd individuals from Olancho to the twenty-four, apparently elderly, pure Pech in the upper reaches of settlement along the Río Plátano in 1990-91 can be seen, then, to provide a significant boost to the number of relatively pure Pech in the region.

This researcher’s brief visit to the Pech region of Río Plátano in May of 1992 confirmed the situation reported by Herlihy and Herlihy. Local informants reported that only a few elderly pure-blooded Pech who were native to the Las Marias area remained and that persons of some Pech heritage lived in Pujulak-Las Marias, two nearby sites which were apparently reported together as Las Marias in the 1988 census, Baltiltuk, and Waiknatara. No estimates of the number of persons of partial Pech heritage in the region were provided by informants and their general opinion seemed to be that, in spite of the INA’s recognition of its Pech heritage and the maintenance of a Pech consejo tribal for the community, the relative importance of the Pech culture in the area was largely subordinate to that of the Miskito. The Olanchano Pech, of course, were recognized as an exception to the prevailing pattern.

At the time of this researcher’s visit, the Moravian minister in Baltiltuk had recently completed a census of the newly arrived Pech in community Las Marias which reported a total of forty-eight to fifty persons, thirteen of whom were classified as adults.
This informant also related a few points on the history of the Pech migration from Olancho. He reported that some Olancho Pech had around 1987 accompanied a German woman, who was then working among the Pech and Tawahka Indians, to the Río Plátano whereupon they became familiar with the location and began to consider the move to Las Marías. According to this informant, the Olanchano Pech arrived in Baltiltuk on April 14, 1991 and a meeting of the local inhabitants decided to receive the newcomers into the community. This arrival date is, however, one year after the departure date from Vallecito reported by Olancho Pech informants of April 1990, and it is unlikely that the journey took an entire year to complete. An informant from Jocomico reported that two members of the migrating group had spent about a year in his village before continuing on to the Río Plátano but he did not indicate that any of the rest of the group had spent time there. Herlihy and Herlihy ([1991]) reported that the group of in-migrants arrived in the region in 1990 and this makes sense in light of their reported departure from Olancho in that same year. It appears, then, that this researcher's informant mistakenly reported the year of arrival as 1991 when in fact it was 1990.

Waiknatara was reported to contain four of the eight houses, with the four other houses located in Baltiltuk, then occupied by the recent Pech in-migrants from Olancho. Prior to the arrival of the Olanchano Pech, the site of Waiknatara was reported to have been utilized by inhabitants of Las Marías and Baltiltuk for purposes of cultivation but was not permanently inhabited. As much was indicated by the site's absence from the 1988 census tabulations, although it did record one house and twenty-six inhabitants at
the time of the 1974 census. Informants' reports were unclear as to whether a portion of
the newly-arrived Pech lived permanently in both Waiknatara and Baltiltuk or whether
the entire group maintained its primary residence in Baltiltuk and, as has long been the
case with the Pech, had working houses in Waiknatara. Herlihy and Herlihy described
Waiknatara as the home of some thirty Pech and the accompanying map showed the site
Waiknatara did not, however, appear on Herlihy's and Leake's map of Indian lands
prepared for the Primer Congreso Sobre Tierras Indígenas de La Mosquitia in September
of 1992. On this map, only the three Pech-occupied sites of Las Marias, Pujulak, and
Baltiltuk appeared at the head of settlement on the Río Plátano. It seems, then, that
some of the Olanchano Pech may have initially settled in Waiknatara but quickly
transferred their primary residence to Baltiltuk and, like other residents of community
Las Marias, continued to cultivate plots at Waiknatara.

Combining the approximately fifty Pech now in the Olanchano families with the
210 persons reported in the 1988 census and with Herlihy and Herlihy's reported
twenty-four pure Pech native to the Las Marias area, then, yields a total of seventy-four
persons of at least predominantly Pech heritage, and an undetermined number of persons
with lesser Pech heritage, among the approximately 260 inhabitants of the region in
1992. Once again, the infusion of new bearers of Pech culture into the middle course of
the Río Plátano has acted to preserve, for a time, a Pech identity in this portion of the
Pech periphery.
The final location on the periphery of the Pech region to be considered is the settlement of Silín in the Department of Colón. This, the only remaining significant concentration of Pech in the periphery besides the zone of Las Marías on the Río Plátano, shares with that other peripheral community the characteristics of owing its survival, indeed its very creation, to Pech migrations from the core area, of being a site of co-occupation of Pech and significant numbers of non-Pech inhabitants, in this case ladino, and of exhibiting a greater degree of assimilation into the locally dominant culture than is seen in most core area sites as a result of continuous close contact, and intermarriage with, the non-Pech locals. Dilution of the Pech culture at the site is reflected in informants’ reports that only a few individuals there still retain the ability to speak the Pech language. Also like Las Marías, Silín was, in spite of its culturally mixed character, among the nine Pech communities awarded a provisional guarantee to their lands by the Instituto Nacional Agrario on August 31, 1991. Although it was reported to have been occupied by Pech since about 1932, Silín does not appear to have been reported as a site of Pech occupation until the 1977 report of Cáliz et al. The site is located some six and a half kilometers to the east of the city of Trujillo, about seven and a half kilometers from Trujillo by road.

Although the area around Trujillo is believed to been part of the pre-Columbian Pech region, the current Pech occupation of Silín dates back only the 1930s when five former inhabitants of El Carbón moved to the site. The Pech population at Silín has since grown through both natural increase and further migrations from the Pech core. While Pech informants in Silín reported that the Pech were the only inhabitants of the site
when the first settlers arrived from El Carbón and that only one ladino family lived there until as late as 1979, when an automotive road was first constructed past the village, the ladino population at the site has also grown so that the Pech are now a minority in the settlement. Indeed, in spite of informants' reports that very few ladinos occupied the site before 1979, the report of Cálix et al. shows that the Pech were already in the minority in 1977. In that year the settlement reportedly contained forty Pech living in eight houses and fifty ladinos in ten houses (1977: 50-51). Jesús Lanza et al. reported a Pech population at Silín of seventy-five persons in 1985 but provided no other information about the site. The entire site recorded a total of seventy houses and 345 inhabitants in the 1988 census and informants reported that the number of houses had risen to about seventy-four by late 1991. Informants also stated that the Silín Consejo Tribal’s 1991 census counted 138 Pech in twenty-one houses and that, as of November, three Pech births had added to the census total. This census included the children of a reported ten mixed Pech and ladino couples, but not the ten ladino parents, among the community’s Pech members.

The report of Cálix et al. stated that the settlement was founded when a cacique of community El Carbón, Catarino Tomé, moved his family to Silín in 1914 to work for Próspero Castillo, a local cattle rancher (1977: 51). This date is contradicted, however, in the authors’ tabular summary of data for the site, which places its foundation in the decade of the 1930s. The latter date agrees with the oral histories of the site as related to this researcher. According to informants in 1991, five Pech moved from El Carbón to a nearby site in 1932 to work for ranchers Don Próspero Castillo Puerto Carrero and
Don Porfirio Lobo and relocated to the Silín site shortly after. The initial group of settlers included two couples, Francisco Alcantara and Balbina Lanza, and Catarino Tome and Luciana Alcantara, and one individual, Felipe Lopez. The following year two more couples arrived from El Carbón and the majority of Silín’s current Pech occupants are said to be descended from these nine early settlers. Other Pech have, however, occasionally moved to Silín from the core area for purposes of marriage or economic betterment in the years since its foundation. Silín informants noted that two Pech had arrived from El Carbón and one from the Culmí area in recent years and an informant from El Carbón reported that three of the former inhabitants of El Pacayal, probably the same in-migrants reported as being from El Carbón by the Silín informants, had moved to Silín upon their abandonment of El Pacayal. Occasional arrivals from the Pech core no doubt serve to reinforce the Pech component of Silín’s heavily mixed cultural identity.
CHAPTER 8

The Changing Landscape of the Pech Region

The Olancho Economy to Mid-Century

The region of Olancho has since the arrival of the first Spanish conquerors been dominated by primary or extractive economic activities. Mining, agriculture and ranching, and the harvesting of natural resources such as timber, resins, fish and wildlife, and useful or economically valuable plants have been the mainstays of subsistence and commercial activities in the department and such activities continue to dominate the region today. Until the second half of this century, however, the relative isolation of the department from Honduras' political, population, and economic centers limited the scale of production in the department. As access to the central and eastern portions of the department improved via the construction of roads suitable for automotive traffic during the middle and latter decades of the century its production of agricultural and forestry products has increased.

The processes of growth and expansion of national systems in eastern Olancho during this century are the structural roots of recent cultural and geographic change experienced by the Pech. These processes, or indicators of them, must be examined, then, to understand how the Pech have arrived at their current condition. Growth in the demographic, economic, and infrastructural systems of Olancho can be discerned in
historical reports and statistics as well as, in some instances, in the present landscape. Such growth illustrates the increasing incorporation of Olancho into the national sphere. From the geographic perspective, however, it is not simply a question of growth, but where growth has occurred. It is the eastward expansion of these sectors of the national sphere that has served to more firmly incorporate the earliest settled parts of the department and, at the same time, to extend the national reach into the Pech core area. We will necessarily be concerned here, then, not simply with the development of Honduras as a whole, but more so with the growth of the demographic, economic, and infrastructural systems specifically in Olancho as well as in the Pech municipios.

Growth in the demographic, economic, and infrastructural systems in Olancho provide fundamentally geographical illustrations of the advance of national society into the Pech core. As in any study of development over time, the full magnitude of a process cannot be evident to an individual researcher until he or she has spent many years in the area. Historical accounts, both written and oral, and archived data are necessary, therefore, to complete the picture of past conditions with which to compare the present situation so that developmental trends can be established. Historical reports and statistics illustrate the status of settlement, population levels, economic activity, and infrastructural development for previous times. Field work provides the opportunity to gather these data from archives and oral histories. Field work also allows the researcher to identify recently important processes of change in the study region via discussions with informants and landscape evidence. Such was the case in this study, where informants’ reports highlighted the recent growth in population and settlement, road
construction, and primary economic activity in the Pech municipios and where observation confirmed the importance of ongoing road construction and of primary economic products such as cattle, coffee, and timber.

Although Olancho has long been famous as a site of great mineral wealth and its potential for gold production has been promoted in reports from the region, it appears that mining’s contribution to the area’s economy peaked early in the colonial era and thereafter the industry fell to the level of a subsistence activity with sporadic, generally unsuccessful, attempts to establish larger commercial operations. West characterized mining as “the most important economy in Honduras” until the latter 1700s when it was surpassed in importance by livestock raising (1959: 772-774). In spite of its predominance within the country during that period, however, “lack of capital, a sparse [sic] aboriginal population and an indifferent government combined to make Honduras a second rate mining area of Spanish America” (West 1959: 775). West identified several periods in Honduras’ mining economy beginning with the colonial era’s emphasis on placer mining of gold “in the streams of the Caribbean coast and adjacent valleys . . . between 1530 to 1560” and later upon “the discovery and exploitation of important vein deposits of gold and silver in the mountainous interior from 1570 to nearly the end of the colonial era” (1959: 767). During the period of vein mining in the interior the industry focused primarily upon silver ores with the production of this metal peaking in 1584 and gradually declining to the end of the colonial era (1959: 769-770). The mining industry collapsed almost completely during “the last decades of the colonial era and the revolutionary period” but “was revived in the second half of the 19th century with the
influx of British and North American capital” (1959: 775). By the late 1950s, however, West reported that the industry was once again in decline with only one large silver mine and subsistence level folk miners, known as güirises, then operating in the country (1959: 775).

Olancho’s fame as a land rich in gold stems primarily from the colonial placer mining activities along the Río Guayape—“the richest of all the gold placer areas of Honduras” (West 1959: 768). Although an inadequate labor supply and depletion of some deposits had led to a decline in gold production in the country by around the middle of the sixteenth century and Honduran mining focused primarily upon silver ores in the interior highlands after about 1570, mining activity in central Honduras still focused on the Guayape gold placers, upstream from the Olancho Valley, in the middle of the seventeenth century. In spite of the early and continued production from the Guayape, as well as other sites in the department, however, the bulk of Olancho’s economic activity since at least the late 1800s appears to have been in other primary economic activities.

Vallejo’s descriptions of Olancho included in the 1887 national census and the 1889 Anuario Estadístico highlighted the predominance of livestock raising and crop cultivation in the lives of the department’s inhabitants. Stock raising was the primary commercial activity in the department near the turn of the century, while crop cultivation was more of a subsistence nature. Vallejo emphasized the importance of livestock in the department, noting that Olancho “tiene hermosísimos valles extraordinariamente fértiles, que contienen grandes cantidades de ganado vacuno y caballar, que es todo lo que forma
la riqueza y patrimonio de sus habitantes" (1893: 99). He further described that "Las principales industrias de este departamento son la pecuaria, la agrícola y la comercial" (1893: 100) and that "Los principales artículos de exportación son: ganado, cueros, zarzaparrilla, oro y plata" (1888: 194). The department’s cattle were reported to have been driven to Guatemala while the remainder of its exports were taken to Tegucigalpa, Amapala, y Trujillo. Vallejo also reported the existence within the department of numerous dairies that produced milk, cheese and butter for consumption in the departments of Olancho, Tegucigalpa, and El Paraíso (1888: 195). Although agriculture, in addition to ranching, was often specified as a primary occupation of Olancho’s inhabitants, little mention was made of commercial crop production except for “un excelente dulce” produced from sugar cane which was sold in Tegucigalpa (1888: 195). In his 1893 publication Vallejo noted the mineral wealth of the department of Olancho in describing various sites of potential and actual exploitation and concluding that “En todo el departamento hay innumerables vetas y placeres” (1893: 100). He did not, however, emphasize its contribution to the overall economy of the department and reported mining to be an important occupation only in the municipio of Juticalpa. Even in that municipio, placer mining was listed after commerce, large and small scale ranching, and agriculture as occupations of the inhabitants (1893: 101). His 1888 publication, however, reported that mining was the second most important industry in the department in terms of income earnings. He stated that “Después de las crías de ganados, la principal fuente de riqueza es el oro en polvo. Casi todos los ríos del departamento llevan, en sus arenas, oro de excelente calidad” (1888: 194). Around the end of the
nineteenth century, then, mining apparently held a relatively important position within Olancho in terms of earnings but much less so in terms of the activities in which the department’s population was engaged and the total land area devoted to subsistence and commercial production. The populations of the two municipios then containing the Pech core region, Catacamas and San Esteban, like each of the other Olancho municipios at the time, were reported to be engaged primarily in agriculture and the raising of livestock.

By the middle of the first half of this century the Monografía del Departamento de Olancho described a situation in Olancho similar to that reported by Vallejo. The department was geared primarily toward the production of animals and animal products for sale along with some slight commercial agricultural production. Most agricultural production was still destined, however, for local consumption and mining was practiced exclusively at the subsistence level by folk miners. The authors’ list of products exported to other parts of the country reflected Olancho’s orientation toward extractive industries: “La exportación es considerable y por falta de datos no podemos fijarla en cantidades concretas; pero sí se exporta: oro, ganado vacuno, quesos, cueros de res, pieles de venado, café y maderas por el Guayape” (Monografía 1935: 40).

The department was not connected to the rest of the country by automotive roads and this undoubtedly discouraged large scale commercial agricultural production. At the time, the planned road from Tegucigalpa to Juticalpa reached only to the town of Guaimaca, near the border between the departments of Francisco Morazán and Olancho, and the stretch from Talanga to Guaimaca was passable only in the dry season because
of the lack of bridges in that section (1935: 40). Not even a road useable in the dry
months by automobiles had then been constructed beyond Guaimaca. The authors
emphasized both the limited development of agriculture and the importance of livestock
in Olancho in the early 1930s (1935: 37).

While gold was included among the exports of the department, mining was
apparently practiced only by small scale folk miners who did not account for a large
proportion of the department’s population and the activity was concentrated in the
western most portion of the department. Indeed, gold was listed among the “principales
productos naturales” of only three municipios, Juticalpa, Mangulile, and Concordia, each
of which are located in the western half of Olancho (1935: 15). The authors noted,
however, that mineral explorations were currently underway in the department and
expressed confidence that mining would soon flourish once again (1935: 12).

After the creation of municipio Culmí in 1889, three municipios occupied the
bulk of eastern Olancho and the Monografía’s description highlights the importance of
livestock and forest products to the economy of this area. The authors listed the
principal products of municipio Catacamas as “Queso, mantequilla, carne, café, cueros,
pieles, novillos, bestias, maderas y vino de coyol,” of municipio San Esteban as “Quesos,
ganado y bestias,” and of municipio Culmí as “Pimienta de paya, hule, zarzaparrilla,
pescado, pieles y madera” (Monografía 1935: 15). The product lists show Catacamas to
have been the most developed and diversified of the three eastern municipios, producing
at the time a variety of animal products for sale from its ranches including meat, hides,
dairy products, and live animals, as well as cultivating coffee and harvesting forest
products in the form of timber and wild animal hides. Elsewhere the authors elaborated that the inhabitants of municipio Catacamas concentrated on the raising of cattle and the cultivation of coffee and yuca at the expense of cultivating basic grains, that the municipio was “una rica zona ganadera y cafetalera,” and that the municipio exported “novillos, café en gran escala, quesos, mantequilla, hule y zarzaparrilla” to other parts of the country (1935: 76). Municipio San Esteban was less diversified than Catacamas but its economic production was still derived from more intensely managed agricultural systems, particularly large animal husbandry, than was that of municipio Culmí. Ranching was the primary economic activity in San Esteban and its cattle were driven to market in the towns of neighboring municipios. The authors described the importance of livestock in the municipio: “La ganadería es el principal medio de vida de sus vecinos. Hay grandes haciendas de ganado vacuno y caballar de muy buena clase” (1935: 112). In addition to ranching, some crops such as sugar cane, coffee, tobacco, and cacao were reported to have been cultivated on a small scale. Municipio Culmí was the least geared toward agricultural and livestock production of the three eastern municipios. Rather, its listed principal products show its economy to have been based primarily upon the harvest of a variety of forest products. As was the case for the other two municipios, however, the principal products list appears to refer to those products that could be sold in significant quantity relative to the municipio’s overall production and ignores the bulk of actual production which was undoubtedly subsistence foodstuffs. The authors indicated as much in their more detailed description of the heritage of the municipio as “estriba en la siembra de maíz, frijoles y yuca de la que preparan una especie de alimento llamado
The same passage continued to mention another important market product of municipio Culmí, pigs, which was omitted from the initial list of principal products: “Además se dedican a la cría de ganado de cerda en gran escala. el cual. una vez cebado, lo traen a la ciudad de Catacamas a verderlo [sic] y también lo exportan para el puerto de Trujillo distante de Culmí 50 leguas.”

Just after mid-century Olancho’s connections to the rest of the country were beginning to improve but the department had yet to rise to a position of leadership in the production of agricultural crops at the time of the 1952 census of agriculture. The department was still relatively isolated and its economy was still based primarily upon the raising of livestock and subsistence agriculture with forest products and gold mining playing secondary roles in importance. Although Valle Turcios’ *Historial Gráfico de las Carreteras de Honduras* showed that the Carretera de Olancho was completed to Juticalpa in 1954 and that it was extended from Juticalpa to Catacamas in 1956 and 1957, Helbig reported that the road from Tegucigalpa was passable as far as Catacamas in 1953. The road was not, however, of the highest quality. The journey from the capital to Juticalpa required an entire day and the stretch of road from Juticalpa to Catacamas, which was passable by “vehículos pesados de motor” was in even worse condition than that between Tegucigalpa and Juticalpa (1965: 50). Beyond Catacamas the road was no longer serviceable for any type of regular vehicular use. Although during and after World War II tractors of the timber industry had been able to travel as far as the settlement of Pataste, in 1953 only four wheel drive jeeps occasionally dared to traverse the camino real to Culmí during the dry season (1965: 67-68). Only travel by
foot and cargo animals was typically possible to Culmí and the valuable mahogany timber in the area at the time had to be transported out by airplane (1965: 67). San Francisco de la Paz could also be reached from Juticalpa by "vehículos pesados" at the time, but the camino real continuing northward to San Esteban and Trujillo was not passable by motorized vehicles (1965: 59, 79). Johannessen also provided indications of the status of the transportation network in Olancho from his mid 1950s work in Honduras noting that road access to the center of the country was just beginning to encourage some commercial agricultural production in the western part of the department while its eastern portions were still extremely isolated. He identified the Lepaguare Valley, at the western end of Olancho’s southwest-northeast transportation corridor, as one of the savanna areas within the country that had recently begun to modernize its agriculture, in part because of improved access from the national core, and correctly predicted that further change was to come:

Commercial cotton and corn farmers with tractors and strong plows have recently been attracted to these savannas in places such as the Lepaguare and Comayagua valleys. New roads, new equipment for turning the sod, and chemical fertilizers give promise of changing the countryside rapidly. (Johannessen 1963: 100)

The other side of the department, however, had yet to be reached by permanent roads or modernization:

Northeast of Catacamas, beyond any road, Paya Indians are reportedly living in a relatively aboriginal condition. In Dulce Nombre de Culme their contact with the rest of Honduras is restricted to a Honduran schoolteacher and a priest who visits them occasionally. (Johannessen 1963: 27-28)
Olancho's 1950 population of 83,910 persons was the eighth largest among the seventeen departments then in existence in Honduras (DGEC 1981: 165). Data from the 1952 national census of agriculture show the department to have also ranked in the middle of the pack in its production of most agricultural crops but to have been a leading producer of livestock. Olancho ranked seventh among all departments in total number of farms, sixth in the production of maíz, third in beans, eleventh in sorghum, sixth in rice, third in yuca, third in cotton, eighth in bananas, eighth in plátanos, first in guineos, and third in coffee (DGEC 1954b: 31-58). In terms of livestock production, however, the agricultural census data ranked Olancho fourth in the number of farms with cattle and first in total head of cattle, first in head of beef cattle, second in head of dairy cattle, first in each the number of pigs, horses, and donkeys, and second in number of goats and in number of sheep (DGEC 1954b: 63-70).

Helbig's descriptions of the region in 1953 also emphasized the primary roles of livestock raising and small scale agriculture in the lives of the department's inhabitants and the secondary importance of forest products and mining to the department's economy. Indeed, he reported that practically the only developed industries in northeastern Honduras at the time were related to the processing of produce from the ranches, forests, and mines of the area (1965: 256). Ranching was described as the predominant commercial activity in Olancho and the raising of livestock and the cultivation of crops engaged the majority of the working population. The 1952 agricultural census reported that some 39,811 Olanchanos were agricultural laborers,
either with or without pay, and this figure was over forty-seven percent of the
department’s total population as recorded in the 1950 population census.

The section of the lower Guayambre valley located in southern Olancho was, like
its upstream portion in El Paraíso department, an important zone of cattle ranching in the
department and included several large haciendas whose absentee owners lived in the
cities (1965: 54). The cattle produced meat and hides for sale and milk was processed
into butter, cream, and cheese (1965: 55). Milk and dairy products produced throughout
Olancho were, however, apparently destined for local consumption because of the
difficulties of transporting perishable produce to the large population centers (1965:
252). Significant quantities of fowl and pigs were also raised in the Guayambre area, as
well as some goats (1965: 55). Unlike areas farther upstream, however, crop cultivation,
although practiced at a subsistence level, was poorly developed and the local residents
often had to purchase basic foodstuffs from more the productive parts of the Guayambre
valley (1965: 55).

The Guayape Valley from the area of Juticalpa to Catacamas and its
northeastward extension up the Río Tinto to the vicinity of San José dominated Olancho
in 1953, as it does today, in terms of population and economic activity. Agriculture was
much better developed in this area than was the case in the Guayambre Valley and was
reported to be the predominant activity in some parts of the valley but certain sections
were still devoted almost exclusively to cattle ranching (1965: 52, 57-58). The valley’s
cattle were driven to Tegucigalpa and Trujillo, as well as to a meat packing plant
operating in Juticalpa, for slaughter and the production of dairy products was also
important (1965: 52, 57, 252). The raising of horses, donkeys, pigs, poultry, and along the Río Tinto, goats, was likewise significant (1965: 57-58). The valley's agricultural production was reported to have been highly developed and included practically all of the food crops grown in Honduras, but it is unclear from Helbig's description what the relative proportions of subsistence and commercial crop production might have been at the time as well as what the magnitude of agricultural exports to other departments was (1965: 52). He did note that coffee, grown in small groves in the Sierra de Agalta from Juticalpa to Catacamas, had achieved a certain level of economic importance and contributed to Honduras' international exports although "La población misma consume una parte considerable de la cosecha" (1965: 58, 249, mapa 5). While coffee cultivation was a significant part of the economy and landscape of municipios Catacamas and Juticalpa other municipios of the department exceeded them in coffee production such that, at the time of the 1952 agricultural census, they ranked only fifth and seventh among Olancho municipios, respectively.

The highly developed agriculture and livestock production of the Guayape Valley did not extend up the Río Tinto valley into the Culmi region. The lives of the inhabitants of Culmi were based upon hunting, fishing, gathering of forest products, and subsistence slash and burn agriculture. Except for roundups of cattle from down valley that sometimes pastured in the area during the dry season, ranching activities did not extend beyond the San José and Pataste area (1965: 67). Yuca, maíz, plátanos, rice, beans, sugar cane, and coffee were grown in the area strictly for local consumption (1965: 66).
The final major section of Olancho described by Helbig was the Río Sico valley of municipio San Esteban in the northern most part of the department. It too was a zone of agricultural production primarily for subsistence or local consumption but its livestock production was sufficiently developed to be a supplier of animal products to other parts of the country. The 1952 agricultural census showed municipio San Esteban to be the third largest producer of cattle in the department, behind only the two most populous municipios of Juticalpa and Catacamas, and to rank thirteenth among all Honduran municipios in total head of cattle. Within Olancho, San Esteban also ranked third in number of horses, third in donkeys, and sixth in pigs. In contrast, San Esteban ranked tenth in maíz production, fourteenth in beans, sixteenth in rice, and second in yuca. Although Helbig described the Agalta Valley to the southwest of the settlement of San Esteban as “bien cultivado” he also specified that the agricultural production of maíz, beans, yuca, sugar cane, plátanos, tobacco and coffee along the middle course of the Río Sico was sufficient only for local consumption (1965: 78). The municipio’s ranching industry was concentrated in its southwestern and central sections from the Valle de Agalta and San Esteban to the vicinity of aldea Conquire and its caserio Las Flores (1965: 78). Municipio Gualaco, San Esteban’s neighbor to the west, was not described in detail by Helbig but the 1952 census of agriculture showed it to also be a leading producer of cattle, ranking just behind municipio San Esteban at fourth place within Olancho and fourteenth nationally in total head of cattle.

The contribution of forest products to the economy of Olancho at mid-century was secondary to that of ranching and agriculture but was nevertheless important locally.
and, in some instances, exports to other departments contributed to earnings. Unfortunately, hard data are not available to help judge the relative magnitude and economic importance of the production of timber, naval stores, wildlife, and wild plants utilized for food, fuel, construction, and medicines to the department. Helbig noted that, at the national scale, forest products were second only to those of the agricultural industries in the subsistence and market economies (1965: 253).

Although he viewed the pine and hardwood timber of Olancho as an important natural resource throughout the department, the production of sawn lumber in Olancho was apparently in decline in 1953 relative to its prior level of production. He reported that only a small number of the country’s sixty-seven sawmills were located in northeastern Honduras and his economic map of the region showed only four currently operating mills in Olancho at Catacamas, Juticalpa, San Francisco de la Paz, and Manto (1965: 254-255, mapa 5). He further noted that several more isolated mills, including those along the Ríos Patuca and Wampú “han tenido que ser cerrados en la última década, después de un corto período de actividad, bien por el agotamiento de las reservas o bien por no ser considerados lo suficientemente lucrativos en vista de los elevados costos de transporte” (1965: 255, see also 69). The bulk of the wood harvested in Olancho appears to have been used locally although the mill operating in Juticalpa was mentioned as one that shipped its lumber both to Tegucigalpa and foreign countries and mahogany timber was reported to have been flown out of the Culmí area after the closure of the mill in La Colonia (1965: 67, 255). Fifteen years after Helbig’s visit to the region, the FAO’s 1968 report on the pine forests of Honduras still attributed
the relatively undisturbed condition of Olancho's pine forests to “the lack of roads” particularly in the northern part of the department (1968: 16). Since at least the late 1970s and throughout the 1980s, however, Olancho has been among the leading departments in the production of both pine and hardwood lumber (COHDEFOR 1990: 27, 33).

Naval stores were included among Helbig's (1965: 254) list of valuable national export products and their collection was a notable activity in several parts of Olancho. Pine resin was collected “en regular escala pero bajo sistema inapropiado” in the vicinity of San José de Río Tinto while the collection of liquidámbar, or sweet gum sap, was practiced primarily in the forests of the Sierra de Agalta by the residents of municipios Culmí and San Esteban (Helbig 1965: 66-67, 77, 79, 203). Other references to the collection of naval stores by Helbig include his statement that, in municipio Culmí, “De vez en cuando vale la pena la extracción de tunú {chicle}, especialmente en las Montañas del Patuca” and indications on his economic map of the collection of hule and liquidámbar in the same area and of liquidámbar collection in the mountains north of both San Esteban and El Carbón (1965: 67, mapa 5). Vino de Coyol, a wine made from the fermented sap of the Coyol palm, was also noted as a significant product of the Guayambre and Guayape-Río Tinto valleys (1965: 34, 61).

Wild animals of the forests and savannas, such as deer, wild boar, jaguar, rabbit, and a variety of birds were hunted for their meat and skins as were fish, alligators, iguanas, and nutria in the rivers near the department’s populated valleys visited by Helbig (1965: 35, 45, 52, 69, 77). Hunting, fishing, and the harvesting of forest products other
than timber was probably most important, however, in the lives of the Pech inhabitants of 
municipio Culmí and northern municipio San Esteban for whom the forests provided an 
important portion of their sustenance as well as “medios de intercambio o trueque” 
(1965:79, see also 66, 235).

Mining ranked well behind agricultural production and forest exploitation in 
economic importance to northeastern Honduras at mid-century (1965:255). The low 
price of gold after 1951 had forced the suspension of activity in the larger mechanized 
mines north of Danlí and southwest of Juticalpa leaving only small scale folk miners to 
operate in places along the Jalán, Guayape, and Patuca rivers and their tributaries in 
Olancho (1965: 45, 256). These gold panners brought their unrefined nuggets to the 
large towns of Danlí and Juticalpa to sell to intermediaries who then resold the gold in 
their small shops (1965: 45, 58). Within Olancho, the mountains southwest of Juticalpa 
between the Ríos Jalán and Guayape near their confluence were reported to produce 
“considerables cantidades de broza de oro y plata” and the Pech of Culmí were said to 
wash gold in the Montañas del Patuca (1965: 52, 67).

The Pech Economy to Mid-Century

Pech subsistence, from pre-Colombian times to the middle of the twentieth 
century, is believed to have been based upon hunting, fishing, collection of forest 
products, and the subsistence-level agricultural production of a shifting cultivation 
system. Like their neighboring indigenous culture groups in lower Central America, the 
Pech were inheritors of cultural traditions and subsistence patterns from northern South 
America. Lange described the importance of a variety of subsistence activities to the
pre-Contact inhabitants of the Atlantic coast of lower Central America including the cultivation of fertile soils along river courses, fishing in the rivers, and, "In addition, the tropical rain forest provided an abundance of wild game, natural resources in wood and other vegetal products, and a wide variety of hallucinogenic and narcotic plants that were important in ritual and perhaps served as bases for regional and long-distance trade" (1984:41-42). Chapman's ethnohistorical reconstruction of pre-Colombian life in northern lower Central America likewise provided a picture of a multiplicity of subsistence activities:

There was very little that the Lowland tribes overlooked as a possible source of food. They cultivated, hunted, fished and gathered. They were producers and gleaners. There was little specialization beyond the sexual division of labor. The women gathered the forest fruits, combed the beaches, caught fish with hooks and paddled the canoes. Among most of the tribes they also planted and harvested. The men hunted, did most of the fishing and cleared the fields for planting. Their principal tools were of simple construction, as, for example, the digging stick, hafted stone axe, single-tube blow gun used with clay pellets, bow and arrow, harpoon and lance.

Special emphasis given to any one of the above activities was determined largely by the natural environment and by the seasonal round. As noted, the Jicaque and the inland Paya and Sumu and the Matagalpa were more dependent on farming than were the coastal Lowland peoples because the mountain valleys provided soil conditions which permitted more intensive agriculture. However, the coastal and riverine dwellers were expert fishermen. A large, aquatic, herbivorous mammal, the manatee or so-called sea-cow, was a favorite food; such reptiles as crocodiles, alligators and iguana were eaten. Turtles were also on their bill of fare. All the Lowland peoples were great hunters. Wild animal life was abundant. Tapirs, peccaries, monkeys, deer, and a great variety of rodents and birds were found everywhere. Gathering was an important activity for the inland as well as the coast dwellers. They gathered a variety of food including clams, snails, turtle eggs, cacao beans, honey and insects. (Chapman 1958:96)

She described in greater detail the agricultural system:

The Indians of this region cultivated in the traditional American "slash and burn" method, using stone axes and fire to clear the fields of trees and undergrowth and
the digging stick to plant. Maize as well as tubers were apparently the staple food before the Conquest. The introduction of bananas and plantains soon after the Conquest supplied another staple which, among many of the tribes, ranked with maize and tubers.

There is evidence that the following foods were cultivated in pre-Hispanic times: maize, sweet manioc (also called yuca and cassava), potatoes, camotes, sweet potatoes, “malanga,” beans, pineapples, chili peppers, gourds, calabashes, cotton, tobacco, achiote, pejivale palm and papaya. (Chapman 1958: 98-99)

Chapman further distinguished the relative importance of hunting and gathering versus cultivation in different environmental zones of the region:

Among the Lowland peoples there were two variants on the farming-hunting-fishing-gathering pattern. Farming was the main subsistence activity of the mountain-dwelling tribes, namely the Jicaque, some of the Paya and Sumu, and the Matagalpa. The coastal tribes—the Miskito and certain tribes of the Paya and Sumu—were more dependent on fishing than on farming. This difference appears to have been one of emphasis. (Chapman 1958: 84)

Helms (1969: 77) concurred with this assessment of the secondary role of agriculture in the lives of the near coast inhabitants, noting that “Before European contact, the coast appears to have been inhabited by a number of small, scattered, semi-nomadic, probably kinship-based groups which subsisted by hunting and fishing, supplemented with limited agriculture.” Davidson (1985: 66), however, believed that agriculture was also of secondary importance to the mountain-dwelling Tol at least by the late 1600s after the arrival of the Spanish may have somewhat disrupted their earlier cultural-ecological patterns. Johannessen (1963) also viewed hunting and gathering as very important, if perhaps not primary, components in the cultural ecology of indigenous groups of the Honduran interior and believed that their hunting activities had probably altered the natural vegetation of Honduras’ upland valley floors prior to the arrival of the Spanish. When the Spanish entered Honduras many of the valleys were covered with savanna
grasslands which Johannessen believed would not have been present without the prior disturbance of the natural forest vegetation and subsequent prevention of its regrowth by the aboriginal inhabitants (1963: 1, 22, 98). He proposed that the Indian’s use of fire in collective hunts could have been responsible for creating and maintaining the grasslands on the interior valleys:

These agricultural Indians were relatively dependent upon the game and fish resources of the land for their animal protein. The earliest mention of the use of fire in procuring game is by Herrera (1725-1726:134), who wrote of conditions in the early 1600’s. The Indians reportedly enclosed a large tract of land, set fire to it, drove the game, and then killed them with arrows and clubs. Sometimes they drove the animals into pits. The mass attacks on game and vegetation could well have accounted for the meadows beside the Río Guayape and the savannas on the expansive, flat valley floor. The small streams with their greener trees would have served as fire beaks, so that the whole valley need not have been burned at one time. (Johannessen 1963: 61)

If Johannessen was correct, then, hunting not only occupied an important place in the cultural ecology of the inhabitants of the interior, it also played a major role in determining the appearance of the physical landscape of the region.

The periods of conquest and colonial rule brought, of course, many changes and disruptions to the lives of the Pech, not the least of which was the settlement and seizure of lands formerly occupied and utilized by the Pech and the resultant necessary relocation of Pech to more isolated, unconquered lands. After independence, Honduran society continued to slowly encroach upon the Pech region until ladinos eventually overwhelmed its core area in second half of the twentieth century. Until the surge of ladino population in the immediate vicinity of the largest remaining Pech settlements after the construction of roads in the 1960s and 1970s, however, the still relatively
isolated Pech of northeastern Olancho, who remained unassimilated into ladino society, appear to have maintained a primarily subsistence-level cultural-ecological system based upon shifting cultivation, hunting, fishing, and collection of forest products. Some of the components and techniques of their subsistence systems had no doubt changed since Contact, notably with the introduction of new crops such as bananas, sugar cane, coffee, and perhaps even bitter manioc, animals such as pigs, and metal tools such as machetes and, occasionally, guns, but the overall character of their cultural ecology as dependent upon what they themselves could produce and harvest from the surrounding environment had changed little through the middle of the twentieth century. Even their limited contact with national society prior to road construction in the Pech core, however, provided some opportunity for the sale and trade of their produce and collected goods and for the purchase of consumer goods from the ladinos. Chapman noted that in the early nineteenth century the indigenous Tol of neighboring Yoro department also subsisted in a manner similar to that described here for the Pech and that “by then they were accustomed to exchanging products with itinerant merchants and had occasional encounters with missionaries” (1992: 16). Although it is difficult to estimate the relative contribution of any particular aspect of the Pech cultural ecological system to their overall subsistence prior to the arrival of large numbers of ladinos, and, with them, the national social and economic systems, in the Pech core, it is certain that some activities, such as hunting and fishing for self consumption, have diminished in importance while others, particularly those related to market economies such as the sale of produce or forest products and laboring for wages from ladinos, have increased.
Descriptions of the Pech core region cultural ecology prior to around mid-century illustrate its primarily subsistence orientation. As the previous section showed, many of the ladino inhabitants of Olancho department also practiced subsistence agriculture but the large and small scale commercial production of livestock and agricultural crops was a much more prevalent part of the department’s ladino livelihood than it was of the Pech while, except for the commercial extraction of timber and gold, the collection of forest products appears to have been of greater importance in the lives of the Pech than of the ladinos. As road access to Olancho began to improve around mid-century, lower transportation costs increased the marketability of its livestock, crops, and timber, further differentiating the ladino and Pech lifestyles in terms of commercial orientation.

Vallejo’s descriptions of northeastern Honduras near the end of the nineteenth century provided little information specifically regarding the Pech. He did not treat them separately from the ladinos in his discussions of the Olancho municipios of Catacamas and San Esteban but his brief comments on the indigenous peoples of the Comarca de La Mosquitia of Colón department illustrated the prevailing view of their lifestyle as one of isolation and self subsistence with a heavy dependence upon local natural resources. He stated that “Los indios payas, zambos, toakas, etc., son de costumbres puramente salvajes. Viven de la caza y la pesca. . . . Es de esperarse que por medio de la persuasión y un trato suave, se hagan desaparecer sus imperfecciones, el terror que les han infundido con sus desmanes las autoridades que los han gobernado, y que se reduzcan á viver en poblado” (1893: 98). While Vallejo’s account was very likely true for some of
the Indians of Mosquitia, his composite description of Indian characteristics in the region exaggerated to some extent the isolation and primitive lifestyle of the majority of Pech who then resided in northeastern Olancho. When Sapper visited the town of Culmi in 1898, for example, many Pech spent Sundays in their houses in the town, some of the children attended school there, and the municipio elected local officials to represent it before the higher levels of Honduran government (Sapper 1899). In contrast to Vallejo's account of the eastern Indians' scant use of clothing, with both men and women described as covering only their waists and upper legs, Sapper (1899) reported that the Pech wore clothing similar to that of the ladinpos, usually of white cotton cloth which was common to other Indian groups of Central America, and leather sandals. They no longer wore clothes of tuno, or bark cloth. An undated photograph of the population and church of Culmi found in the Monografía del Departamento de Olancho (1935: 85) clearly shows the prevalence of white cotton clothes in the Pech wardrobe by at least the early 1930s. Sapper's (1899) account did, nevertheless, provide indications of the importance to the Culmi Pech of their own agricultural production and of the natural resources of the forests and streams. Their subsistence lifestyle was implied, of course, by his report that the majority of their time was spent not in the town but in outlying houses located closer to their fields and the forests. He also reported that their primary food was yuca, which he specified, in contrast to Conzemius and others, was the nonpoisonous variety, which was followed in importance by corn and other crops such as beans and bananas. The Pech also hunted with blowpipes and guns, fished with rods and harpoons, and utilized local medicinal plants (Sapper 1899).
The most detailed depiction of the Pech lifestyle and subsistence activities during the early years of this century comes, of course, from Conzemius' ethnography. His work plainly describes a cultural ecology that depends fundamentally upon subsistence cultivation and the use of wild products for food, construction, household utensils and occupational implements. It also makes clear, however, that the Pech were not entirely isolated, did not produce all of their material possessions themselves, and engaged in limited trade with neighboring cultures. Like Sapper, Conzemius (1928: 13, 16) noted that the Pech of Olancho spent the majority of their time not in the larger settlements of Culmí and El Carbón but in outlying sites nearer to fields, forests, and streams where it was easier to provision themselves with produce and wild products and to raise animals. Although he described Pech agriculture as "muy poco desarrollada" as a result of their being "algo indolente y se contenta de lo que proporciona con poco trabajo la naturaleza para vivir y subsistir," Conzemius nevertheless noted that bitter yuca, an agricultural product, was their principal food (1928: 47-48). It was eaten in the form of *sasal*, a roasted, sour loaf that resists spoilage, tamales, tortillas, and alcoholic and nonalcoholic beverages (1928: 48-50). Maíz was the second most important food and the Pech also cultivated bananas, plátanos, and sugar cane and, on a smaller scale, beans, rice, sweet potatoes, malanga and yautía, yams, squash, cacao, pineapples and other fruits, and chiles (1928: 8, 47, 49). Fruit trees grown near the houses included avocados, oranges, limes, and pejivalles (1928: 8, 47). Coffee was also grown in small quantities primarily for sale to *ladinos* on the north coast rather than for self consumption (1928: 47). Pigs appear to have been the main livestock raised by the Pech and many of those produced
were also destined for sale in the north (1928: 44). Hunting, however, was said to be the preferred occupation of the Pech men and hunting parties occasionally made extended excursions in search of game (1928: 45). Hunters used muzzle-loaded guns and, when powder was not available, bows and arrows, and were often accompanied by dogs that helped pursue the game (1928: 45-46). Many types of birds and animals, including monkeys and deer, were taken but the meat of preference was the jagüilla, or peccary (1928: 8, 46). The peccary was the most abundant game animal in the region and monkeys and peccaries were reported to have supplied the majority of the meat in the Pech diet (1928: 8, 46). Fish, which the Pech caught with hooks, traps, harpoons, arrows, and, on large communal fishing trips during the Lenten season, poisons, was also an important food item (1928: 46).

The vegetable products obtained from the surrounding environment also contributed to the Pech food supply and provided materials for many other daily needs as well as for trade. Uncultivated fruits such as zapote were eaten and a variety of herbs and portions of larger plants were utilized for medicinal purposes (1928: 47, 53). Wood, palm leaves, and bamboo were employed in the construction of house frames, roofs, and walls which were fastened together with vines and strips of tree bark (1928: 41). Cloth made from the inner bark of several forest trees, but primarily from the tunu tree (Castilla tunu), was no longer used by the Pech for clothing in Conzemius’ time but was still used for sheets, small hammocks, and burial shrouds (1928: 43, 56). Hibiscus bark was used to make hammocks, baskets, and bags or sacks for carrying cargo (1928: 43). Trees also provided wood to fuel fires for cooking and lighting and for the manufacture
of a variety of implements such as cooking utensils, bows and arrows, fishing spears, dibble sticks, and river craft (1928: 41-42, 46-47, 49-50). The gourds of the jicaro were used as plates, bowls and drinking glasses, the leaves of the pita (*Ananas macrodentes*) were an important source of fiber for cordage, and various plants provided dyes, soaps, and fish poisons (1928: 42-44, 46).

The Pech were not, however, entirely self-sufficient and obtained a variety of manufactured products through purchase or trade including “tela, escopetas, pólvora, machetes, cuchillos, ollas de hierro, anzuelos, hilo, sal,” medicines, axes, and adzes (1928: 44, see also 42, 53). Because the Pech already resented their encroachment into Pech lands, they were adverse to laboring for wages from neighboring *ladinos* and money for the purchase of such items was earned primarily through the sale of their own agricultural, animal, and collected produce (1928: 44). In prior years the collection of *hule* and *zarzaparilla* had been the primary source of income for the Pech but in Conzemius’ time the market for these products was depressed and the Olancho Pech earned money from the sale of yuca in the form of *sasal* to local *ladinos* and from communal excursions to Trujillo to sell pigs, coffee, deer skins, and forest products such as *pimienta gorda* to *ladinos* and *liquidámbar* resin and sassafras bark to Caribes (1928: 17, 44-45).

Writing shortly after Conzemius’ time in northeastern Honduras, Díaz Estrada’s brief account of the Pech of El Carbón described a lifestyle similar to that presented by Conzemius. He reported that their principal food and primary crop was sweet and bitter yuca, that they also cultivated “caña, guineo, plátanos, arroz, frijoles, [and] maíz,” and
that forest plants provided them with materials for construction, cordage, and medicines (1922: 494, 495). The Pech raised pigs, chickens, and ducks and were “adictos a la caza.” sometimes hunting alone for several days at a time (1922: 495). Fish, particularly the cuyamel found in the Río Ojo de Agua, was also identified as one of their principal foods (1922: 494).

Because the Pech of El Carbón were a minority of the total population of municipio San Esteban, the Monografía did not provide information specifically regarding their cultural ecology in the 1930s apart from the municipio’s dominant ladino lifestyle. The Pech’ majority status in municipio Culmí, however, allows the Monografía’s descriptions of economic products and activities there to be taken as indicative of the local Pech cultural ecology at the time. The Monografía highlighted the importance of wild products and pigs as items of trade and of agriculture in the subsistence of the municipio’s inhabitants. Culmí stood out in the listings of principal natural products from the rest of Olancho’s municipios as the only one whose produce was predominantly wild items obtained from the forests and streams. No agricultural items were included among its principal products, which were identified as “Pimienta de paya, hule, zarzaparrilla, pescado, pieles y madera,” while the department’s other municipios’ products came primarily from agricultural crops or livestock (Monografía 1935: 15). Elsewhere, however, the authors noted the importance of pigs as an item of trade, reporting that Culmí’s residents “se dedican a la cría de ganado de cerda en gran escala, el cual, una vez cebado, lo traen a la ciudad de Catacamas a verderlo [sic] y también lo exportan para el puerto de Trujillo distante de Culmí 50 leguas” (Monografía
This passage also shows that the Pech marketed their pigs, and probably, it can be assumed, their other trade goods as well, in Catacamas, the nearest relatively large population center to Culmí, in addition to the more distant Trujillo which Conzemius identified as their primary market center. Besides the commercial items produced in Culmí, the authors also noted the important role of subsistence agriculture in the municipio. They reported that the cultural heritage of the inhabitants was based upon “la siembra de maíz, frijoles y yuca de la que preparan una especie de alimento llamado zazal” (Monografía 1935: 81).

Lunardi’s article on the Pech of Olancho was devoted primarily to considerations of their historical contacts with Spaniards and ladinos and their impacts upon Pech settlement history but it also provided brief indications of their lifestyle in the early 1940s. Of the Pech of El Carbón he reported:

Los Payas no son olleros ni alfareros. Pescan de diversas maneras, con arpón y con machete; cazan, cultivan yuca, principalmente; no saben hacer el fuego. Lo encienden con fósforos. Duermen en el suelo o en tapesco, sobre una corteza del árbol de Capulín. No crían ganado ni caballos; crían cerdos para venderlos en Trujillo, y pocas gallinas, a las cuales se refiere el P. Goicoechea. (Lunardi 1943: 18)

In agreement with the other sources considered here, Lunardi’s comments highlight the importance of the region’s natural resources and of small scale agriculture in the subsistence strategies of the Olancho Pech as well as implying the need to acquire certain manufactured goods not produced by the Pech themselves. He noted that the Pech of both El Carbón and Culmí typically lived outside of the principal settlements in huts closer to the forests and fields (1943: 18, 35). Their abilities as hunters and fishermen
were considered to be superior to their agricultural skills although the cultivation of yuca and the raising of pigs were recognized as important components of their cultural ecology. Even in his brief statements, the need to acquire pottery, machetes, other metal goods, medicines, and matches through trade or purchase is evident. In addition to the sale of pigs, Lunardi also identified the sale of corn, which was a crop of secondary importance and preference in the Pech diet, as a means of earning income.

At mid-century, as roads were beginning to open up the western and central portions of Olancho, the Pech region of the two northeastern municipios was still largely isolated and the Pech cultural ecology was still based primarily upon subsistence agriculture and exploitation of the surrounding natural environment supplemented by limited sales of domesticated produce and collected wild products. Helbig summarized the Pech lifestyle throughout northeastern Honduras: "fuera de la agricultura en pequeña escala, se dedican a la caza, pesca y recolección de productos silvestres e intercambio de los mismos, sobre todo hule y liquidambar de los bosques montañeses" (1965:235). His depictions of the livelihoods of the Olancho Pech gave greater emphasis to the role of wildlife and forest products in the area of El Carbon while concentrating more upon the role of agriculture among the Pech of Culmí, but it is likely that the cultural ecology of the two groups of Pech was actually very similar. He noted that the Pech of El Carbón

A pesar de la escabrosidad de los caminos a través de las montañas, estos payas, como buenos andarines selváticos, cazadores, pescadores y coleccionadores de productos naturales de las selvas que les sirven como medios de intercambio o trueque, están en constante contacto con los de su casta establecidos a orillas del Sico, en la región de Culmí, a orillas del Paulaya y aun del lejano Río Plátano. (Helbig 1965: 79)
His description of the Pech of Culmí provided information on their agricultural activities as well as the collection of forest products of commercial value:

Además de la caza y la pesca también los payas se han dedicado desde mucho tiempo a la agricultura organizada mediante quemás. Para su alimentación principal prefieren la yuca, mientras que los ladinos dan prioridad al maíz. . . . Aquí sirve también como alimento principal el plátano—cocido o frito—el cual en otros lugares sólo es de importancias secundaria. Fuera de estos dos productos cultivan también en pequeña escala, para su propio consumo, plátanos, arroz, fríjoles, caña de azúcar, café, pita y otras agaves. . . . En los bosques de las montañas los payas recogen liquidambar con muy buenos resultados; en 1953 les pagaron desde 60 hasta 75 lempiras por 25 botellas de este producto. De vez en cuando vale la pena la extracción de tunú (chicle), especialmente en las Montañas del Pataca, donde también se practica el lavado de oro. (Helbig 1965: 66-67)

Although he here identified the Montaña del Pataca, which rises above the west bank of the Río Pataca and lies between Culmí and that river, as an area exploited by the Pech for tunú, or chicle, and gold, Helbig elsewhere reported that the mountains rising to the west of the Río Paulaya and lying between Culmí and El Carbón, the Montaña del Carbón and the Sierra Río Tinto, were areas important for the collection of liquidambar resin (1965: 203, mapa 5). In describing the vegetation of the Paulaya Valley, he noted that

A unos 300 m. de elevación comienza a manifestarse el liquidambar, tan recto como una vela, que se destaca como uno de los árboles más altos del bosque. Muchos de ellos han sido sangrados, posiblemente por los payas de Culmí y de la zona de El Carbón quienes, cuando andan en busca de algo para recoger, no temen las distances ni los obstáculos más grandes y, si el árbol en pie ya no es productivo, el hacha la que se encarga de abatirlo, rajarlo y sacarle así el último resto de su resina; en esta forma se ha diezmado la existencia del liquidambar, la cual en otro tiempo había sido considerable, sobre todo en las zonas de pinares. (Helbig 1965: 203)
Helbig made no mention of the role of livestock among the Olancho Pech but he stated specifically that cattle ranching was of little importance in the immediate vicinity of either Culmí or El Carbón (1965: 67, 78).

The data of the 1952 census of agriculture indicated a lifestyle in municipio Culmí, the majority of whose population was still Pech, that was largely consistent with the descriptions of Helbig and others earlier in the century. The census’ data for San Esteban cannot be considered to be indicative of the Pech cultural ecology in that municipio, however, since they constituted a minority of the total population and were probably below average producers of many of the products included in the census. Rather, the situation in Pech-dominated northeastern San Esteban, in the vicinity of El Carbón, was probably more similar to that in neighboring municipio Culmí than it was to that of ranching-dominated central and southwestern municipio San Esteban. The agricultural census showed municipio Culmí to rank at or near the bottom in the production of most agricultural crops and animals among Olancho’s twenty-two municipios. Besides the prevalence of subsistence-level cultivation techniques, however, the municipio’s low total production of agricultural goods as recorded by the census is attributable in part to its low total population as well as to its relative isolation, which could have contributed to an under-reporting of the actual production. Not only did Culmí record the lowest population of any Olancho municipio in the 1950 population census but its 794 inhabitants were barely more than half of the number of residents in Jano, the next most populous municipio in the department with 1,569 inhabitants (DGEC 1981: 174). Not surprisingly, then, the municipio ranked last in the production
of corn, beans, cattle, and pigs, and, along with some other municipios of the department, registered no or insignificant production of sorghum, wheat, potatoes, sweet potatoes, cotton, tobacco, and other crops (DGEC 1954b: 477-496). Although it was not the leading producer of any agricultural product in the department, municipio Culmi ranked slightly higher in the production of a few items. It ranked tenth in the production of yuca, ninth in rice, fourteenth in bananas, sixteenth in plátanos, twentieth in guineos, and nineteenth in coffee. Its departmental ranking in the production of each plátanos and guineos was, however, last among the municipios for which data were provided.

Culmi’s generally higher, although often still low, rankings in terms of per capita production, as calculated using the 1950 population and the 1952 production figures, illustrates the importance of agricultural activities to its population. Among the products in which the municipio ranked last in absolute production, its per capita production ranked twentieth for corn, twenty-first for beans, thirteenth for plátanos, nineteenth for guineos, and twelfth for pigs. Like its absolute production, its per capita production of cattle ranked last among all Olancho municipios further underscoring the relative unimportance of ranching among the Pech. Culmi’s rankings in per capita production of items for which it did not rank last in absolute production were also higher than the corresponding absolute production rankings. It ranked first in per capita production of yuca, fifth in rice, third in bananas, and seventh in coffee. The most notable of these was its first place ranking in the per capita production of yuca, which was the only category here considered in which Culmi led the department and which supports the earlier observations of the relative importance of that crop among the Pech.
The *municipio*‘s production and per capita production rankings serve to illustrate the relative importance of the various products in comparison to the other *municipios* of Olancho but can be somewhat misleading in terms of the relative importance of particular products within Culmi itself. Its rankings of fifth in the per capita production of rice and seventh in per capita production of coffee, in particular, should not be taken as indications that the *municipio* was a prodigious producer of these products. In actuality, these rankings were achieved with the recorded production of only 164 quintales of rice and 349 quintales of coffee for the entire *municipio*. Likewise, its rank in the middle of the pack in per capita pork production resulted from the enumeration of only 563 pigs. Its relatively lower ranking in the per capita production of corn masks the fact that this staple was produced in greater quantity than either rice or coffee and, in fact, the reported 1,582 quintales of maiz produced was slightly greater than the 1,579 quintales of Culmi’s department-leading per capita production of yuca. On the other hand, Culmi’s low ranking in absolute and per capita production of beans correctly reflected the relative unimportance of that crop within the *municipio* as well as relative to other *municipios*. Only 39 quintales of beans were reported to have been produced during the census year. The quintal is a unit of measure equivalent to one hundred pounds or 0.045 metric tons (DGEC 1954b: XV-XVI; SECPLAN 1994d: 5).

The agricultural census data do not illustrate, of course, the totality of Pech cultural ecology as described by other sources. They provide no evidence concerning the substantial role of hunting, fishing, and gathering in the Pech lifestyle that was reported by sources with broader ranges of consideration. They do serve, however, as a
point of comparison with the other sources' reports of the agricultural components of the Pech lifestyle. In particular, the census confirms the importance of yuca in the Pech region relative to other parts of the department but contradicts somewhat the other reports of its dominance over corn within the Pech region. The presence of some ladino cultivators within the municipio at the time would presumably have elevated the amount of corn grown relative to that of yuca compared to what would have been the case in a purely Pech-occupied municipio, but the ladino proportion of the population in the municipio is believed to have still been rather small at mid-century. The production of equal amounts of corn and yuca does not necessarily mean that the two foods were consumed in equal amounts. As indicated by Lunardi, much of the corn may have been sold rather than eaten. Perhaps yuca production was under reported by the census. The relative importance of bananas in the region, although not of plátanos and guineos, is also seen in the census data, as is that of pigs and the unimportance of cattle.

Modern Economic Activities in Olancho

After the middle of the century, population growth, infrastructural improvements, and, particularly in the Olancho Valley, the adoption of modern technologies in agricultural production combined to raise Olancho’s economic production significantly and the department began to more fully realize its long recognized potential as a producer of agricultural and forest products (Figure 45, Figure 46, Figure 47, Figure 48). At the time of the 1988 census of population, Olancho had the fifth largest population among Honduras’ eighteen departments yet the data from the 1993 census of agriculture showed it to rank first in the area of land cultivated and the area in pasture, as
Figure 45. 1993 Honduran cattle production by municipio.
Percent Change in Cattle Production by Municipio from 1974 to 1993

Figure 46. Change in cattle production by municipio from 1974 to 1993.
Figure 47. 1993 Honduran coffee production by municipio.
Figure 48. Change in coffee production by municipio from 1974 to 1993.
well as in the production of corn, beans, sorghum, soybeans, cattle, swine, and equine species (Photo 1, Photo 2). COHDEFOR's data on the departmental production of lumber from mechanized sawmills from 1977 to 1989 show Olancho to have ranked in the top five, and most frequently in the top two or three, producers of pine lumber throughout the period (COHDEFOR 1990: 27). It was the second leading producer of lumber from broad-leaved trees by mechanized sawmills in 1977 and 1978 and led all other departments in that category every year thereafter (COHDEFOR 1990: 33). The national production of hardwood lumber by manual sawmills greatly exceeded the quantity produced by the larger mills in 1988 and 1989, the only years for which national statistics of manual production were provided, and, although the data were not presented for each department individually, it can be discerned that Olancho was at least the second largest, and very probably the largest, producer of hardwood lumber from manual sawmills in 1988 and 1989 (COHDEFOR 1990: 35).

Photo 1. Cattle pasture in the Olancho Valley.

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Olancho’s growth in population and infrastructure and its expansion of economic activity during the second half of the century extended northeastward from the departmental core to encompass the Pech region infusing a multitude of economic, cultural, and landscape changes into the Pech core area. Roads initially constructed to facilitate timber exploitation in northeastern Olancho connected the Pech municipios to the rest of the country encouraging ladino in-migration into the Pech core region and prompting the expansion of commercial agricultural production (Photo 3). The region was still dominated by primary economic activities, with 78.3 percent of municipio Culmi’s and 77.3 percent of municipio San Esteban’s economically active populations engaged in work classified by the 1988 census under the category of “Agricultura, Silvicultura, Caza y Pesca,” but the importance of agriculture and timber relative to hunting, fishing, and the collection of secondary forest products in the two municipios,
as well as the absolute scale of timber harvests and agricultural production, increased significantly over their pre-1950 levels. By 1988 the populations of municipio Culmi and municipio San Esteban had grown to the third and fourth largest in the department, respectively, and the two municipios were important contributors to the department’s total production of a variety of items. Municipio Culmi was the department’s leading producer of bananas, malanga, and cacao in 1993 and ranked second in the production of coffee and pineapples; third in yuca, plátanos, guineos, pigs, chickens, and eggs; fourth in rice, soybeans, sugar cane, oranges, avocados, and mangos; fifth in corn, sorghum, limes, dairy cows, mules, and goats; and sixth in cattle and horses among the twenty-three Olancho municipios. Municipio San Esteban ranked first in the production of donkeys; second in goats; third in oranges, cattle, horses, and sheep; fourth in corn, tomatoes, watermelons, guineos, limes, dairy cows, milk, mules, chickens, and eggs; fifth
in chiles dulces, plátanos, and pigs; and sixth in rice. The two municipios each comprise one of the eight subdistricts of the Región Forestal de Olancho for which forestry statistics are compiled by COHDEFOR. Municipio Gualaco likewise comprises one of the forestry region subdistricts while the remaining five subdistricts are composed of multiple municipios. Over the entire period from the beginning of 1982 through September of 1987, San Esteban was the second largest producer of pine timber in the department. It was the leading producer of pine timber in Olancho from 1984 to 1986 during the height of harvesting operations of the Corporación Forestal Industrial de Olancho (CORFINO) mill within its boundaries (RFO 1988: 36, 42, 89). Culmi ranked seventh in total pine timber production over the period from 1982 to late 1987 but it was one of only four subdistricts in the department to record any pine timber production in 1982 and it ranked fifth in pine production in 1983, 1986 and 1987 and sixth in 1984 and 1985 (RFO 1988: 42). Exhaustion of the harvestable pine resources in San Esteban led to the transfer of CORFINO's lumbering operations to municipio Gualaco at the end of 1986 and San Esteban fell to last place in pine timber production in 1988 and 1989 (COHDEFOR 1990: 36; RFO 1989: cuadro 1; RFO 1990: cuadro 1). Culmi's production of pine timber ranked sixth in the department in 1988 and fifth in 1989 (RFO 1989: cuadro 1; RFO 1990: cuadro 1). The Maderas del Wampú sawmill in Culmi was the country's tenth largest producer of pine lumber in 1989 (COHDEFOR 1990: 28-31) (Photo 4). As is the case with pine, Olancho is a leading producer of hardwood timber in Honduras and the northeastern municipios contribute significantly to its total production. Broad-leaved tree species accounted for some four percent of the harvested
timber in Olancho from 1982 to 1987 with the bulk of its volume harvested by small
c-scale loggers and manual sawmills (RFO 1990: 45). Culmi and San Esteban were the
first and second ranking producers, respectively, of tropical hardwood timber in the
department over that period with Culmi accounting for 39.35 percent and San Esteban
for 32.23 percent of the total harvest (RFO 1990: 45). In 1988 and 1989 Culmi was a
close second to Catacamas in the production of hardwood timber and San Esteban
ranked a more distant third among the eight forest region subdistricts of Olancho but still
far ahead of the fourth ranking producer in each year, Juticalpa. In 1988, Catacamas and
Culmi combined to produce 82.6 percent of the department’s hardwood timber while
San Esteban’s production accounted for another 9.7 percent (RFO 1989: cuadro 1). In
1989, the two leading municipios produced 83.8 percent of the department total and San
Esteban produced 10.2 percent (RFO 1990: cuadro 1). Culmi’s Maderas del Wampú
sawmill was by a wide margin the single largest producer of hardwood lumber in the
country in every year from 1980 to 1989 (COHDEFOR 1990: 34). Olancho’s northeastern **municipios** have also contributed significantly to the country’s manufacture of non-lumber wood products. A portion of Culmi’s pine and hardwood timber is milled within the **municipio** into thin veneers which are assembled elsewhere into plywood by one of the country’s two plywood manufacturers and San Esteban’s pine timber harvested by CORFINO in the mid-1980s was used in part for the production of wood chips to be exported for paper production (COHDEFOR 1990: 36; RFO 1988: 103). The two **municipios** are also important producers of liquidámbar resin, a large portion of which is collected by their Pech inhabitants. At the national scale, the production of liquidámbar resin is small compared to pine resin collection, equaling less than one percent by weight of the amount of pine resin collected each year from 1977 to 1986 and less than two percent of pine resin production from 1987 to 1989 (COHDEFOR 1990: 24). Within Olancho, however, the collection of liquidámbar is of greater importance than pine resin. Indeed, COHDEFOR’s regional report of activities in Olancho from 1982 to 1987 did not include pine resin among the secondary forest products of the department (RFO 1988: 49). The report stated that during that period liquidámbar was produced primarily in the Culmi, San Esteban and La Unión subdistricts although it also recognized the predominant role of the Pech in its collection (RFO 1990: 49, 108-109). In 1988, the only year for which liquidámbar production data is available at the subdistrict level, Culmi accounted for 124 barrels and San Esteban accounted for 108.1 barrels out of a total departmental production of 275.2 barrels (RFO 1989: cuadro 1). The 53.38 tons of liquidámbar production from Culmi and San Esteban that year also

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equaled over sixty-three percent of the licensed liquidámbar collection nationwide (COHDEFOR 1990: 24).

**Pech Cultural Ecology after Mid-Century**

The increase of the ladino population in, and the extension of the national social and economic systems into, municipio Culmi and the Pech region of northeastern municipio San Esteban after mid-century have led to significant changes in the cultural ecology of the Pech. The greater population density throughout the Pech core area and the reduced land area available for exploitation by the Pech resulting from ladino occupation and government restrictions have diminished the role of more extensive subsistence activities such as hunting and fishing. The need to replace such sources of sustenance and increased contact with ladino society have encouraged greater Pech participation in the regional economy through the sale of agricultural produce and labor to meet their basic needs and heightened expectations for their quality of life. Although the Pech still meet the majority of their food and shelter needs through their own efforts and express a desire to live apart from the now dominant ladino population, they have been drawn into increased interaction with the larger society to earn income for the acquisition of a variety of manufactured products, to fight for their perceived rights as an oppressed indigenous group, and to acquire basic and specialized educations that they hope will lead to a better quality of life. Such interaction, although perhaps eventually leading to a higher standard of living for the Pech, increasingly incorporates them into the national society and threatens their relative economic independence and cultural traditions. The younger generation no longer speaks the Pech language fluently and this
has lead to concerns among the older Pech that the language will be lost entirely and to efforts to teach Pech to students in the schools of the Pech communities. Oral traditions are less frequently passed down by the elders to the younger Pech, who sometimes now learn the stories from a volume published by local anthropologists. A variety of religious and development agencies work with the Pech as well as local ladinos to improve methods of agricultural production and health care. Most Pech communities have individuals trained in rudimentary dentistry and health care by a religious group in Santa María del Real and government sponsored health clinics are available in the larger settlements of the region. Although some Pech maintain an interest in the medicinal properties of local plants, increased exposure to and availability of modern medical practices and information has apparently lead to a reduced importance of the traditional curanderos and an increased desire for manufactured medicines which must often be purchased.

The principal subsistence activity of the core region Pech communities today is the shifting cultivation of agricultural crops on lands naturally covered in broadleaf forests such as the natural levees and floodplains of streams flowing across the valley floors and the flanks of nearby mountains (Photo 5). Ladino occupation of lands surrounding the Pech communities largely limits their cultivation to the territory recognized as part of the communal holdings of the larger communities or, in a few cases, to parcels of unoccupied national land far removed from the sites of Pech and ladino settlement. The remaining Pech inhabitants of Pisijire retain a small parcel of their former land on the Rio Pisijire vega but are forced to supplement this with other land
rented from *ladino* owners. A few Pech have also purchased parcels of land outside of the communal holdings for their private use.

The lands of the Pech communities are owned communally by the members of the community but its parcels are generally exploited on an individual basis, with each family responsible for its own food production. A few instances of collective cultivation of fields within the communities by groups of men for commercial production were reported, however. The collective efforts seem to be recent adoptions encouraged by government or private development agencies. The total land cultivated by an individual or family is generally not contiguous. Rather, their fragmented parcels are scattered in different parts of the communal lands, in part to take advantage of differing slope and moisture conditions. Annual crops are grown in a typical system of shifting cultivation wherein a field, after being cleared of its natural vegetation, is cultivated for a few years until yields decline or the field is overtaken by weeds at which point it is abandoned for a
new site (Photo 6). The abandoned site is rested for several years and its fertility
rejuvenated via the growth of secondary vegetation. Land that has been cleared of its
mature forest cover and is in some stage of vegetative secession is known as guamil.
The clearing of mature forest for cultivation is said to be prohibited by the Honduran
government over much of the Pech core area for purposes of environmental preservation
and watershed protection and the Pech are largely restricted to the use of lands already in
cultivation or in guamil for their agricultural production. Their shifting cultivation
system, therefore, rarely involves the felling of new patches of forest and depends
primarily upon rotation among guamil plots. Coffee groves are planted in the riparian
and mountain forests, however, without felling the large trees, which then serve to shade
the coffee trees (Photo 7). After a fallow period sufficient to restore fertility to the
guamil plot, the cultivator returns to clear the secondary growth and utilize it for another
cultivation period. If the previous cultivator of a plot has no intention of returning it to
his field rotation the plot is considered to be available for use by any other member of the
community who chooses to clear and plant it.

Typically, if not forced to return to a particular parcel earlier by other constraints,
the Pech gauge a field’s readiness to return to cultivation by the stage of vegetative
regrowth. When the secondary vegetation has grown to a height of six to ten feet,
usually in about four years, the plot is generally considered to be again ready for
cultivation. If the production of a re-cleared guamil parcel proves insufficient in spite of
the level of regrowth and the time elapsed since it was last cultivated, it is left to rest for
a longer period. The actual rotation among parcels reported by Pech informants varied
considerably according to the native productivity of particular locations and other constraints, primarily the availability of land, on the farmer. A fallow period of five to seven years was recognized by some informants as optimum but the actual length of time that a farmer's parcels remained in rest was often reported to be somewhat shorter. Informants reported continuous cultivation of a plot ranging from one year to five years before abandonment and fallow periods ranging from one to seven years. Cultivation-to-fallow ratios ranged from 5:4 and 4:5 in a few particularly fertile areas to 1:4-5 and 2:6-7 in areas requiring longer rejuvenation times or where cultivable land was more plentiful. Most commonly, informants indicated that rather short rotation cycles were used such as one to two years of cultivation followed by two to four years of fallow or two to three years of cultivation followed by three to five years of fallow. Although somewhat variable, the rotation cycles reported in the Pech core generally fall within the parameters
of nearby swidden agricultural systems described by others. Lobb's overview of swidden or roza agriculture in Latin America noted that cultivation periods in swidden systems averaged only one to three years and were followed by a fallow period from two to longer than twenty-five years and, in more specific reference to Central America, he also related Carter's description of fallow periods of only two to six years among some of the modern Maya of Guatemala (1993: 124). The resulting cultivation-to-fallow ratio range of 1-3:2-6 for Guatemala encompasses most of the rotation cycles reported by the Pech. Chapman also described a cultivation system similar to that of the Pech among the Tol
Indians of Montaña de la Flor, in northern Francisco Morazán department of Honduras. She reported that most of the Tol fields were cultivated for only one year and rested for at least five years (1992:40). Some fields were cultivated for two years before being left to fallow but rarely was the cultivation period of a single field longer than two years. Of course, shifting cultivation is not practiced exclusively by farmers of indigenous heritage in Central America, Honduras, or the Pech core region. *Ladino* farmers also practice swidden agriculture and, in northeastern Olancho, are said to be responsible for the majority of new forest clearings. Loker's study in central Honduras found *ladino* rotation cycles varying according to the location of the fields from no fallow period or a 10:5 cultivation-to-fallow ratio on alluvial soils that were cropped only one time a year to a 4:5 ratio on piedmont soils with slopes of ten to twenty-seven degrees and a 2:5 ratio on slopes steeper than twenty-seven degrees (1986:457). Except for areas of permanent cultivation such as coffee groves, no Pech informant reported the use of fields that could be continuously cultivated without a fallow period.

The pattern of communal ownership and individual exploitation is reflective of both Pech cultural traditions and Honduras' agrarian laws. Prior to the escalation of population densities in the region and the surrounding of Pech lands by *ladinos*, the Pech core region in northeastern Olancho was better suited to a communal land tenure perspective with poorly defined and transient individual rights to specific parcels that was sufficient for a shifting cultivation system practiced by a relatively small and widely scattered population. Although the specifics of earlier Pech conceptions of land tenure are not known, the need to distinguish Pech lands from *ladino* lands in the Pech core was
minimal prior to the middle of the twentieth century and the entire area, except for parcels being actively cultivated or rested in rotation, was apparently viewed as available for use by any family that chose to do so. In this sense, even the lands outside of the tracts titled to the Pech in 1862 would have been considered as communally owned in as much as they were viewed as historically occupied and utilized almost exclusively by the Pech and any unutilized parcels were available to be placed into production by Pech families without concern for abstract legal claims to them. At the national scale, however, the government held a similar view that superceded the Pech perspective. All lands within the national boundaries not legally ceded to municipalities or individuals were held to be national lands, that is, lands owned by the government and, by extension, owned communally by all Hondurans. Unutilized lands in the Pech core were, therefore, considered not as Pech lands available only to the Pech but as national lands available to any Honduran that chose to exploit them. As ladinos occupied lands surrounding the sites of active Pech exploitation, decreasing amounts of the territory of the Pech core remained available for Pech exploitation that could realistically be considered as communal property of the Pech. The Pech communities which were able to establish consensual or legal recognition to sufficient amounts of land surrounding their settlements to support continued shifting cultivation, however, maintained a communal tenure perspective within their individual community boundaries that allows for exploitation of unutilized parcels by any family that decides to put it into production. Although probably reflective, albeit on a smaller scale, of the Pech’ traditional conception of land tenure, the communal ownership of lands guaranteed to Pech
communities by the Instituto Nacional Agrario is also now dictated by Honduran law as
a condition of national legal recognition of their rights to the land. INA’s 1991
resolution recognizing the rights of the Xicaques, Pech, and Garifuna to possession of
the lands which they then occupied outlined the process by which titles would be granted
and established conditions to be observed by the communities receiving them, including
that “Las tierras adjudicadas no podrán ser vendidas o transferidas total o parcialmente
ni cedidas a cualquier título para su explotación por terceros” (INA 1991).

The present contribution of domesticated plants and animals to the subsistence of
the Pech is probably greater than it has been at any previous point in their history. Food
crops and trees cultivated in shifting fields and more permanent gardens and small
animals kept near the houses contribute to the household food supply and provide a
means of earning income through the sale of surplus production (Photo 8). The Pech
grow a variety of field crops and garden plants including corn (*Zea mays*), beans
(*Phaseolus vulgaris*), sweet and bitter varieties of yuca (*Manihot esculenta*), yams
(*Dioscorea alata*), sweet potatoes (*Ipomoea batatas*), malanga (*Xanthosoma
violaceum*), sugar cane (*Saccharum officinarum*), pineapples (*Ananas comosus*),
bananas and plátanos (*Musa* sp.), coffee (*Coffea arabica*), izote (*Yucca elephantipes*),
maracuyá (*Passiflora edulis*), pataste (*Sechium edule*), and peppers (*Capsicum annum*).

Tree crops grown near houses or fields include oranges (*Citrus sinensis*), mandarins
(*Citrus reticulata*), limes (*Citrus aurantifolia*), mangos (*Mangifera indica*), achiote
(*Bixa orellana*), jícara (*Crescentia cujete*), guayabo (*Psidium guajava*), cacao
(*Theobroma cacao*), avocados (*Persea americana*), marañones (*Anacardium

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Photo 8. El Carbón family extracting sugar cane juice with a *sangaro*.

occidentale), papayas (*Carica papaya*), nances (*Byrsonima crassifolia*), siguelos, madreado (*Gliricidia sepium*), coyol palms (*Acrocomia mexicana*), corozo palms (*Orbignya cohune*), and, rarely, apples (*Malus* sp.) and coconut palms (*Cocos nucifera*) (Photo 9). Lentz has collected a list of over 150 plants utilized by the Pech of El Carbón including some forty food and seven beverage plants (1993). Domesticated livestock include chickens, ducks, turkeys, pigs, goats and cows, although very few of the latter two are commonly seen. Although a wealth of plant and animal resources are found within the Pech lands, the actual combinations and quantities of plants and animals
comprising the resource complex available to different families varies. No Pech family possesses all of the different domesticated plants and animals that can be found in the various communities and the amount of land cultivated in a particular crop or the number of animals or fruit trees owned by a family depends upon the desires, abilities, and wealth of the family as well as upon the availability of land in locations suitable for each item. House sites on the serrania were often perceived to be poor locations for dooryard garden plants and fruit trees because of the acidity and low fertility of the soil as well as the potential for damage to the plants by free-roaming cattle and other livestock if fencing material was not available. Houses in the serrania, then, tended to have fewer garden plants and fruit trees than houses located on the edge of the serrania or near streams. Production of coffee and pigs in quantities sufficient for sale requires the availability of initial capital. A coffee grove requires a sufficient land area suitable for
coffee cultivation. Pigs and cattle require locations where the animals can be protected from theft or harm by wild animals. Both reasons were sometimes given as explanations for the Pech in particular places not having larger numbers of livestock.

As fundamentally subsistence cultivators, however, practically all Pech families cultivate fields of basic foodstuffs, the most common of which are corn and yuca (Photo 10). Beans, rice, bananas, and sugar cane were also often mentioned among the primary crops of many families. The area planted in these crops varies but corn is usually the most extensively planted followed in order by beans, rice, and yuca. The area planted in rice is probably more variable than that of the other main food crops and is the most likely of the four to not be grown by a particular family. The availability of seed and suitable land as well as the ability of the farmer were identified by informants as factors limiting the cultivation of rice. The area planted annually in yuca is usually smaller than that planted in corn, beans, and rice, but its contribution by weight to a family's total food production is much greater than would be indicated by the area cultivated. Yuca yields the first or second, behind corn, greatest amount of produce among the basic food crops for most Pech families. Its greater yield per area than the basic grains and its continuous production obtained by replanting immediately after harvest throughout the life of the field allow the production of a significant amount of food even though the area planted is often much smaller than that planted to corn and somewhat smaller than that planted to the other basic grains.

During the year from May 1, 1992 to April 30, 1993, the period encompassed by the agricultural census of 1993, the national yield of corn was 1.4 metric tons per hectare
harvested while that of yuca was 7.8 metric tons per hectare harvested (SECPLAN 1994f: 44, 61). The national yield of beans during the same period was 0.51 metric tons per hectare harvested and rice yielded 2.35 metric tons per hectare harvested (SECPLAN 1994f: 46, 48). In Olancho, the yields per hectare harvested were 1.86 metric tons of corn, 0.63 metric tons of beans, 1.65 metric tons of rice, and 6.3 metric tons of yuca (SECPLAN 1994f: 44, 46, 48, 61). Municipio Culmi’s yields likewise showed yuca to have the highest yield per hectare in the immediate area of the Pech core. Culmi’s yields per hectare harvested were 1.08 metric tons of corn, 0.59 metric
tons of beans, 1.09 metric tons of rice, and 6.78 metric tons of yuca (SECPLAN 1994b: 50, 112, 172; 1994c: 72). *Municipio* San Esteban reported yields per hectare harvested of 1.84 metric tons of corn, 0.9 metric tons of beans, 3.07 metric tons of rice, and 4.52 metric tons of yuca (SECPLAN 1994b: 50, 112, 172; 1994c: 73).

The Pech' own estimates of agricultural yields vary widely, often overestimating the yields reported by the census. Pech and ladino informants sometimes reported potential corn yields from twenty to thirty cargas of grain corn per manzana in times of average or excellent production. The *carga* is a unit of weight equal to 200 pounds and the *manzana* is an areal measure described as a square with 100 thirty-three inch varas on a side and equivalent to 0.699 hectares (DGEC 1954b: XVI; SECPLAN 1994f: 21). The highest corn yield estimate equivalents, then, range from 2.59 to 3.89 metric tons per hectare, which are greater than the average yield reported for any Olancho *municipio* and more than double and triple the average yield reported for *municipio* Culmi in the 1993 census. The higher yield estimates may reflect the influence of educational efforts by outside agencies that have taught local residents that greater potential yields are possible than are actually being achieved as well as a tendency to report best case scenarios of production on the best lands in good climate.

Evidence of the potential for higher yields than the 8.35 and 14.17 cargas per *manzana* indicated by the census for *municipios* Culmi and San Esteban respectively, is found, however, in other sources. Loker reported an average corn production of sixteen cargas per *manzana* in the El Cajon region of central Honduras (1986: 456).

Information collected by the Dirección General de Recursos Naturales' agricultural
coordinator in San Esteban showed that, among the ninety-three producers with whom
the extension service worked in 1990, independent farmers achieved an average yield of
ten cargas per manzana and campesino groups achieved average yields of 22.5 to
twenty-five cargas per manzana. This agency's data show a wide range in the actual
production achieved within the municipio, even among farmers receiving assistance, that
is probably the norm in the region.

Among Pech cultivators, too, the yield would be expected to vary according to
local field and weather conditions with some fields yielding at the upper end of the range
reported and others at the lower end. In general, however, the alienation of the Pech
from much of the best vega lands in the region and the limited application of modern
agricultural techniques such as the use of chemical fertilizers and pesticides among the
Pech makes it unlikely that their fields would consistently produce at above average
levels. Rather they might be expected to produce at average levels or below. Some
informants qualified their yield reports as representative of occasions of good production
with no loss in the fields to animals or bad weather. Others simply reported expected or
potential yields that were almost always greater than the municipio average and lead one
to believe that typical production is greater than is probably the reality. One informant
from Culuco who farmed parcels in both Culuco and the newly-occupied and distant site
of Saguacito vividly illustrated the importance of the productive capacity of particular
fields in determining yield when he reported yields two to three times greater in
Saguacito than could be obtained even with the use of fertilizers in Culuco. Even his
maximum reported potential yield of twenty-five cargas of corn on the cob, about 12.5
cargos of grain corn, in his more productive fields in Saguacito was, however, well below the twenty-five to thirty carga potential reported by other informants.

Not only does this informant’s report of yields ranging from 7.5 to 12.5 cargas of grain corn on good lands and from 2.5 to four cargas on poorer land show the variability in productive capacity of lands which are actually farmed in municipio Culmi, they are also believed by this researcher to more accurately reflect the range of yields currently achieved by the majority of Pech farmers, particularly those that have yet to adopt newer techniques and technologies encouraged by development agencies in the region, in spite of a number of reports of higher yields. Several other Pech informants concurred with the accepted range of corn production, citing yields of from six to ten cargas of grain per manzana. Even a production of ten cargas per manzana, which is equivalent to 1.3 metric tons per hectare, is greater than the 1.08 metric tons per hectare average reported for Culmi by the census and it would be expected, therefore, that most fields produce yields of lesser amounts.

The practices of harvesting yuca as needed by the family rather than harvesting an entire field at one time and of replanting stems from plants in the same spot as the tubers are harvested complicate estimates of yields from yuca fields (Photo 11). Most informants stated simply that yuca is harvested as needed but a few reported general rates of harvest such as five pounds per day or fifty to sixty pounds every one or two weeks without relating the total harvest to the area planted. The few yield estimates for yuca provided by other Pech informants ranged from twenty to forty cargas per manzana which is less than might be expected in light of the average yields reported by
the 1993 agricultural census of 52.27 and 34.88 cargas per manzana for Culmi and San Esteban, respectively. The Pech reported growing both sweet and bitter varieties of yuca, with the bitter yuca being used primarily to make sasal and sweet varieties used for other preparations.

The tropical climate of Honduras maintains sufficiently high temperatures for crop cultivation the year round and the subsistence farmers of northeastern Olancho typically complete two cultivation cycles of basic grain crops annually. The first crop planted and harvested during the year is known as the primera and the second as the
Both a *primera* and *postrera* crop are often grown in a single field, requiring that the *primera* be harvested before the *postrera* can be planted and allowing for no overlap in the *primera* and *postrera* work in the same field. Across the region, however, there is sufficient variability in the farming schedule to create some overlap with the harvesting of the *primera* occurring in some fields while the *postrera* is planted in others. For purposes of census tabulation, the 1993 agricultural census considered crops planted during the seven months from March to September as *primera* and those planted from October to February as *postrera* and these periods accurately reflect the actual practice in northeastern Olancho (SECPLAN 1994:22). The annual cultivation cycle is tied somewhat to the seasonal distribution of rainfall but informants' accounts indicated a degree of variation in the schedule followed. A *ladino* informant reported that the typical schedule in the area of Culmi is to plant the *primera* in June and harvest it in September followed by the planting of the *postrera* in November which is then harvested in January and February. The various Pech accounts collected, however, show considerable variation in the agricultural calendar followed by different individual farmers. The *primera* was consistently reported to be planted in May and June which coincides with the beginning of the rainy season in early to mid-May and allows the clearing and burning of fields during the drier preceding months. There was less consistency, however, in the timing of the rest of the agricultural cycle as reported by different informants. The *primera* crop was reported to be harvested as early as October and as late as January and the same months were reported as the time for planting the *postrera*. The *postrera* harvest was reported to occur anywhere from January to May.
depending upon when it was planted. A typical pattern for the Pech might be described as planting the *primera* in May and June with the harvest occurring from September to November and planting of the *postrera* from October to December with the harvest in March and April although, as noted above, there is considerable variation in the schedule followed by different farmers.

As with the scheduling of agricultural activities, the area planted in the different subsistence crops commonly cultivated by the Pech varied among individual farmers. Most informants reported that they planted fields of corn and beans twice a year and rice and yuca only once, generally in the *primera*. Informants' estimates of the area cultivated in corn ranged from 1 to 5 *manzanas* in *primera* and from 0.125 to 3 *manzanas* in *postrera*. Estimates of the area cultivated in beans ranged from 0.25 to 2 *manzanas* in *primera* and from 0.5 to 2 *manzanas* in *postrera*. Estimates of the area cultivated in rice, among those who reported planting rice, ranged from 0.25 to 5 *manzanas* and in yuca from 0.25 to 2 *manzanas*. The total area cultivated in corn and beans by an individual informant ranged from 1.19 to 6 *manzanas* in *primera* and from 0.625 to 4 *manzanas* in *postrera*. The total area cultivated in all four crops in *primera* ranged from 1.3 to 12 *manzanas*. Ignoring a couple of atypical values at either extreme their respective ranges, one informant’s reported cultivation of five *manzanas* of rice and another’s reported cultivation of only two tareas, 0.125 of a *manzana*, of corn in *postrera*, provides a more accurate reflection of common cultivation areas among the Pech. If these reports are discounted, the reported range of *postrera* corn cultivation area changes to from 1 to 3 *manzanas*, the range of rice cultivation area changes to from
0.25 to 3 manzanas, the range of total postrera area cultivated in corn and beans changes to from 1.25 to 4 manzanas, and the range of total primera area cultivated in the four crops changes to from 1.3 to 8 manzanas.

It should be noted that all of these ranges were distilled from informants' reports in a manner that provides maximum and minimum potential areas of cultivation by a farmer which may not over- and underestimate the actual total area usually cultivated. Most informants reported areas cultivated in particular crops within a range that they considered typical for themselves such as one-half to one manzana or one to three manzanas. The lower ends of the reported ranges were used to construct the minimum cultivation areas presented here while the higher ends were used to construct the maximum cultivation areas. While this is reasonable for presenting a range for the area in cultivation for a particular crop across informants, it likely obscures somewhat the area cultivated in multiple crops by a single farmer. It is unlikely that a farmer would plant the minimum or maximum reported area for every crop in a given season or year. Rather, most farmers would be expected to adjust the area cultivated in each crop in accordance with limiting conditions at the time in order to meet their expected needs. Thus, if a lack of seed or suitable land at planting time reduces the area that can be planted in one crop, the area planted to other crops would be increased to compensate for the reduced production to be expected from the first crop. Typically, a farmer might plant two to four manzanas of corn, 0.5 to 1 manzana of beans, rice, and yuca in primera and 1 to 3 manzanas of corn and 0.5 to 1 manzana of beans in postrera. Other
crops such as sugar cane, bananas, sweet potatoes, yams, and malanga complement the primary food crops.

In some families more than one cultivator contributes to the agricultural production but the total area farmed by the family does not seem to increase in proportion to the areas reported by individual informants for each additional cultivator. Rather, the additional labor contributes to some expansion of cultivation but also seems to serve to lessen the burden of food production for the family on each individual providing the opportunity for greater involvement in other activities that support the family such as coffee cultivation or wage labor.

Wild animal resources continue to form a part of the diet of many Olancho Pech but their contribution relative to that of agricultural crops and domesticated animals appears to have decreased significantly from the levels described by Conzemius, Díaz Estrada, and Lunardi. The Pech generally reported that they do not hunt as much as they used to because of the increasing scarcity of local game and the distance that must be traveled to reach areas of sufficient game stocks for good hunting. Many Pech still fish with spears and hooks but complain that the fish stocks, too, have been greatly depleted in recent years. The Pech blame the large increase in the ladino population and the indiscriminate harvesting of fish and game by both local and visiting ladinos for the reduction in local animal resources. The ladino occupation of lands surrounding Pech villages has restricted the territory in which they can hunt conveniently and the greater human population density in the region has meant that the available animal resources must be shared by more people. Further exacerbating the problem of limited supply is
the fact that much of the game and fish harvested is no longer destined for local consumption by either Pech or ladinos. Sport hunting by ladinos from Catacamas was mentioned as an important factor in the decimation of the local deer population and local and itinerant ladino fishermen were reported to catch many of the largest fish using indiscriminate methods such as poison and dynamite to sell in regional and national markets, particularly during the period prior to Easter when fish are in great demand for the traditional Holy Week meals.

The role of hunting in the Pech cultural ecology has probably declined to a greater extent in recent years than has that of fishing. The Pech still enjoy hunting but the activity seems today to be restricted largely to the opportunistic taking of the few small animals remaining near the villages, such as peccary (Tayassu sp.), pavo silvestre (Penelope purpurascens), and tepesquinte (Agouti paca), rather than the conduct of extended trips in search of large game animals described by earlier writers (Photo 12). They hunt for food in the course of extended travels outside of the village, as on occasional trips to distant fishing sites, but informants rarely reported traveling long distances solely for the purpose of hunting. One informant reported occasionally carrying his rifle to and from his fields in the course of his agricultural labors in the event that he should happen upon a game animal as well as to shoot pests that might damage his crops, and which might also be eaten. This informant, from Pueblo Nuevo Subirana, and one other, from Vallecito, sometimes took advantage of their duties as guides for this researcher through surrounding lands as an opportunity to hunt game that we might happen across with their .22 caliber rifles. Most Pech, however, do not own guns and
informants from Culuco, Pisijire, and Jocomico specifically reported that no one in their villages hunted with rifles. Typically, the Pech reported hunting only "de vez en cuando" and, particularly for those without guns, the importance of having a good dog to assist in the hunt was noted. Dogs are particularly useful in finding and flushing tepesquinte from their riverside caves after which, as the animal attempts to escape in the river, Pech hunters armed with machetes and stationed up- and downstream from the den can corner and kill it.
Although the Pech living near the Río Wampú in Jocomico, Pisijire, and Culuco continue to fish its waters, they complain that the river has been overfished and that the ladinos have poisoned and dynamited the river so that large fish are now rare. Catches observed on several occasions consisted of fish three to six inches in length. The Pech from these villages and others farther from the Wampú make occasional excursions of one to two weeks to rivers farther from the centers of population in the municipio in hopes of catching the one to three foot long cuyamel fish for both self consumption and sale. Most commonly, groups of Pech fishermen make these trips, which can require two to four days of walking to reach the fishing site, prior to Holy Week so that a portion of the catch can be sold while demand is high. A few informants also reported fishing the distant rivers at other times of the year such as in May, August, and September, when rains are less and the rivers are lower and clearer making it easier to spear fish. In recent years even these more distant rivers, the Paulaya, Guarascá, Pao, and the lower Wampú, have attracted ladino commercial fishermen and the frequency of catching large cuyamel has declined. In El Carbón, the Pech reported fishing for cuyamel in the Ríos Ojo de Agua and Grande and also complained of reduced catches since the arrival of ladinos in the area. In addition to fish from the larger rivers, smaller streams also supply the Pech with turtles, minnows, and freshwater snails and crabs as a source of food.

Although the Pech are able to supply most of their food needs from their own agricultural, hunting, and fishing efforts, they are not totally self sufficient. They purchase a variety of manufactured and processed goods from local merchants including
clothing, shoes, medicines, salt, soap, vegetable fat, agricultural implements such as machetes and hoes, and household items such as cooking pots and food grinders. They also must purchase seeds and food items such as basic grains and sugar when their own production has been insufficient to meet their needs as well as young pigs and, rarely, cattle for fattening. Land costs are also a factor for some Pech. The Pech of Pisijire have to rent land from *ladino* landowners to obtain a sufficient area for planting to meet their needs and a few individual Pech were reported to have bought parcels of land from *ladinos* for their private use. The subsistence production activities of the Pech, then, are part of a peasant lifestyle rather than the sole components of a purely subsistence cultural ecology. The Pech earn money for the purchase of needed goods from several sources, the most widespread of which are the sale of produce including surplus agricultural production, coffee, pigs, and, occasionally, fish, and the sporadic laboring for wages from neighboring *ladinos*.

In spite of their view of *ladinos* as interlopers in the Pech region, many Pech are forced to hire themselves out as a source of manual labor to local *ladino* landholders to earn the money needed to purchase items that they cannot themselves produce. The Pech do not generally work full time or every day for wages but do work on an occasional basis, particularly when there is a pressing need for money in the family. Informants described their work schedules in a variety of ways such as one to three days a week, about ten days a month, or simply three or four days or six to eight days occasionally when there is a need. In 1991-92 the wage for a day’s labor, from seven in the morning to noon, was commonly ten to twelve lempiras, then equivalent to about
1.75 to 2.00 dollars. Information from the few informants who could provide an estimate of time worked or money earned per year indicates that about one hundred working days and 1,000 lempiras earned annually is not uncommon but many Pech certainly work less and a few probably work more than this. Labor opportunities for most Pech are not spread evenly throughout the year but vary somewhat with the seasonal needs of the ladino landowners. Informants reported working for wages by clearing land in preparation for planting, planting crops, clearing agricultural fields and coffee groves of weeds, cutting forage for cattle, and harvesting coffee. The double cropping system practiced in Honduras creates wage labor opportunities over a greater portion of the year than would be the case if only one crop was produced annually but the greatest demand for labor probably occurs at the time for clearing and planting fields of annual crops, particularly the primera. The activity of greatest seasonal variation in labor demand, however, is the harvesting of coffee which was commonly reported to take place in November, December, and January. In 1992, however, some Pech were still employed in the coffee harvest in late February. The coffee pickers were paid three lempiras per thirty pound bucket harvested and earned from fifteen to twenty-five lempiras a day. One informant reported that she worked for about a month during the harvest season but most Pech laborers are believed to have spent less time picking coffee and the total proportion of Pech employed appears to be rather small. For example, only about eight persons from community Agua Zarca were reported to have harvested coffee for extended periods.
Of course, those Pech fortunate enough to have groves also sell their own coffee to earn money (Photo 13). Many families, however, had no coffee plantations and those that do typically reported to have only from 0.5 to 2 manzanas planted. Most informants expressed a desire to plant coffee, or to expand the area already planted, and, if their desires are realized and coffee cultivation among the Pech continues to increase, the crop can be expected to play an increasingly significant role in the Pech economy.
Other activities also provide income for some Pech such as the collection of *liquidámbar* resin and gold and the participation in commercial projects established or encouraged by development organizations. These activities are less widespread among the Pech, however, because they are dependent upon the local availability of commercially valuable natural resources or the fortuitous contact with organizations that have introduced or supported the projects. Because of their proximity to areas in which large numbers of *liquidámbar* trees (*Liquidambar styraciflua*) grow, the collection of *liquidámbar* resin is practiced only by the Pech of Pueblo Nuevo Subirana and the communities surrounding El Carbón (Photo 14). Members of the other Pech communities reported that they did not “saca aciete” because the trees do not grow in their vicinities. Even in the communities that do collect resin, however, informants reported that they collect less than they used to, or don’t collect it at all, because of recent reductions in access to *liquidámbar* lands. As *ladinos* have moved into areas populated with *liquidámbar* trees, they have destroyed large numbers of trees through forest clearing and refused to allow the Pech to work the trees remaining in nearby areas. Because collection areas are several days’ walk from either El Carbón or Subirana and the resin is collected by a process of cutting holes in the trunk of the tree and allowing the resin to collect there for one to two months before harvesting, the Pech have also complained that *ladinos* living nearby sometimes steal the resin before a worker returns to collect from his trees. Residents of El Carbón reported that they will no longer be able to collect resin in the mountains to the southwest because of the large numbers of *ladinos* that have moved into the area since 1990. As *ladinos* have moved into the
Paulaya Valley northeast of Subirana, the Pech of both Subirana and El Carbón have also lost access to some of their former areas of *liquidámbar* collection in the Paulaya’s tributary valleys in the Montaña del Carbón. Harvested resin is transported on a worker’s back in containers weighing about fifty pounds to either El Carbón or Paulaya where it is sold for about five lempiras per pound. Informants reported that one man might collect more than 500 pounds of *liquidámbar* resin in a good year and that a typical range of annual production is from about 200 to 600 pounds. For comparison, COHDEFOR’s records show that in 1979, the year of greatest production, an estimated
450 men in cooperative groups organized in Olancho by the Sistema Social Forestal program produced some 700 barrels, about 353,500 pounds, of liquidámbar resin which averages to a harvest of 785.5 pounds per man.

The collection of gold as an income-earning activity was reported only among the Pech of El Carbón. Prospectors travel a day by boat down the Río Grande to the vicinity of the mouth of Quebrada de la Guara to spend one to two weeks mining the placer deposits by panning material broken from the river bed with an iron pole. The washed gold is sold to intermediaries who come to El Carbón for about ninety lempiras per penique, a unit of weight described as being equal to about eight to ten grams. Although one informant reported that he goes prospecting about once a month and can collect five peniques of gold in two weeks, it is doubtful that this is typical for the community as a whole. Rather, another informant’s account that most Pech prospectors work only a couple of weeks a year panning for gold and that the yearly production for the entire community is only about eighty peniques probably better reflects the importance of gold mining in El Carbón.

Government and non-governmental development organizations are active throughout Honduras and the Pech communities are no exception. The incidence of development agency activity is widespread among the various Pech communities, but most agencies have contact with only a few Pech villages and only a portion of the residents in any village reported participating in the income-earning activities or agricultural improvement techniques advocated by the organizations. Outside agencies, in addition to providing education aimed at improving health care, agricultural
production, and the odds for eternal salvation, have provided training and material support for development projects intended to provide additional sources of income for participating Pech communities. Not all development projects are successful, of course, and the non-functioning, windmill-powered electrical system for the school in Subirana and the dry aquaculture ponds in El Carbón testify to the difficulties of maintaining projects once the initial investment of time and money has been made to establish them (Photo 15). Nevertheless, the potential for increased income from projects encouraged by outside development agencies can be seen in various Pech communities. Education, equipment and facilities supplied through a development project coordinated by the Escuela Superior del Profesorado “Francisco Morazán” in Tegucigalpa and supported by the Instituto de Cultura Iberoamericana have introduced woodworking and fish farming into some Pech communities, most notably that of Agua Zarca. Instruction in
woodworking techniques and donated equipment provided to community Agua Zarca by
the project enable the construction of simple furniture for use by the Pech households as
well as for occasional sale to earn money. The woodworking information and equipment
have also benefitted community Jocomico, where furniture construction is also practiced
(Photo 16). The Escuela Superior's project also constructed two large aquaculture
ponds on community Agua Zarca's land in 1990 which are used to grow tilapia provided
by the ENA in Catacamas for consumption in the village and for sale. The initial success
of the ponds in Agua Zarca has led the Pech of Pueblo Nuevo Subirana to consider
attempting an aquaculture project in their own community.

Although a variety of development organizations have contact with different
Pech communities, the most intense involvement with outside agencies in the early 1990s
was found in El Carbón. The lands of communities El Carbón, El Cumbo, and La
Laguna are the focus of an Integrated Management Area of the Proyecto Desarrollo del Bosque Latifoliado, a cooperative project between COHDEFOR and the Canadian International Development Agency that encourages conservation and sustainable use of tropical broadleaf forests (Photo 17). Workers from the project spent about four days a week in El Carbón conducting resource inventories and organizing and instructing the residents. The project had organized cooperative groups of loggers and cultivators and to which it taught methods of sustainable timber harvest, reforestation, and sawing and marketing of lumber as well as improved agricultural techniques aimed at increasing
production and reducing the need for new forest clearing. The project also contributed to the building of a new, two story centro de capacitación that was under construction in 1992 and was intended to be used for conducting classes in agriculture, livestock raising, carpentry, and sewing for local residents (Photo 18). It was also hoped that the center would in the future house a secondary school for the community. The three schools in the Pech region of municipio San Esteban conducted classes only to the sixth grade level in the early 1990s. In addition to the establishment of the Integrated Management Area, the region surrounding El Carbón, including some lands outside of the territory guaranteed to the Pech communities, has been proposed for the establishment of an indigenous reserve. If approved, the reserve would not only amplify the area controlled by the Pech, it would also add another level of legal recognition to
their land claims and further protect them from the continuing attempts at ladino incursion.

The situation at El Carbón perhaps best typifies the paradox of Pech survival in the modern world. Although they desire to live apart from ladinos and preserve their cultural traditions, they can no longer retreat to distant, uninhabited lands before the advance of ladino society. The Pech are finding it necessary, therefore, to increase their involvement with outside agencies, as well as in the regional and national economies, in an attempt to survive as a culturally distinct and geographically separate group in the midst of the growing ladino presence. Their increasing interaction with the larger society, however, serves to accelerate change in their traditional cultural and subsistence patterns, thereby further threatening their chances for long term cultural survival. The sale of surplus agricultural produce, coffee, and pigs traditionally grown by the Pech, of liquidámbar resin, gold, and fish gathered from the forests and rivers, and of furniture, fish, and lumber from projects encouraged by outside agencies, and working for wages from neighboring ladino landowners are all means by which the Pech earn money to meet basic needs. Each activity also represents, however, an occasion of interaction with, and integration into, the national social and economic systems that threaten to rob the Pech of much of their cultural distinctiveness.

**Environmental Realms of the Pech Core**

In the Pech core region, a three-fold classification of the land based upon vegetative cover and topography is common. The Pech usually distinguish between the three environmental realms of montaña, serrania, and vega. The montaña is
mountainous land covered by mesophytic tropical broadleaf forest. In the Culmí area, *montaña* generally begins at about 700 meters elevation and occupies the valley walls above (Photo 19). Its slope is steeper than that of the valley floor. This forest is a westward extension of the lowland tropical rain forest that occupies western Mosquitia.

In contrast to the upland *montaña*, the *serranía* is found on the valley floor, roughly between 500 and 700 meters. The *serranía* lands are more gently sloping to level lands and are dominated by scattered *ocote* pine trees (*Pinus oocarpa*) with an understory of grass and shrubs (Photo 20). Oaks grow in the *serranía* as well, but are commonly killed off in the annual burnings of the grassland. The density of the pine trees varies but the canopy is usually open, permitting grass growth on the floor and giving the landscape the appearance of an open woodland or savanna.
Vega lands are, of course, stream floodplains and, like the serranía, are found on the valley floor. Their slopes, then, are comparable to those of the serranía but their natural vegetative cover is that of the montaña—broadleaf forest (Photo 21). They represent the downslope extension of the montaña forests, cutting through the serranía along the more fertile and better-watered lands adjacent to the stream channels. They are broadleaf gallery forests traversing the serranía. Serranía, in turn, occupies the interfluvial valley floor surfaces.
Savannas

Even within Honduras, these vegetation patterns are not unique to the Pech region. The existence of savanna in areas climatically capable of supporting tropical forest generally arouses the interest of geographers and, indeed, Carl Johannessen surveyed the savannas of interior Honduras in the mid-1950s (1963). He described this same pattern of forested mountainsides and vegas with savannas on the valley floor stream terraces and piedmonts throughout central Honduras. In the valleys of his study, however, the mountain slopes were often covered with pine forest rather than broadleaf.
The savanna areas nearest to Culmí that were studied by Johannessen are in the Río Guayape valley near Catacamas and in the Agalta Valley near San Esteban. The Guayape savannas are down-valley to the southwest of Culmí. The Agalta savannas are located west of Culmí across the ridge of the Sierra de Agalta.

Historical accounts indicate that the Guayape Valley savanna pattern continued northeastward up the Río Tinto valley to the Culmí area prior to ladino penetration of the region. Davidson reports that Padre Subirana described the pine vegetation in the Culmí landscape from his work there, which began in 1857 (1984:452). Karl Sapper visited Culmí in 1898 and described the journey from Catacamas as being through pine forest and savanna. He stated that the village of Culmí itself was located in such a landscape (1899). Eduard Conzemius conducted studies among the Pech in 1921. He described the vegetation of the region as being predominantly broadleaf forests but noted that around the Pech settlements of Culmí and El Carbón there were savannas of grass, pines, nances, and oaks (1928:8).

Johannessen concluded that the Honduran savannas probably originated from periodic fires set by the aboriginal human population, perhaps to drive game animals during hunts. Thus, he believed that the grasslands are the result of human modification of the natural broadleaf vegetation.

The pine and grassland vegetation may well have been created and maintained by human intervention, but it is important to note that physical geography seems to play an important role in determining where it has survived to this day. In the Culmí region of the Guayape Fault there is a strong positive correlation between the surface geology.
mapped on the 1991 Geologic Map of Honduras and the vegetation cover mapped by the
FAO in 1968 (IGN 1991; FAO 1968). The recent alluvial deposits of the valley floor
indicated on the Geologic map coincide with the scattered pine vegetation area of the
FAO map. The older rocks of the surrounding mountains shown on the Geologic map
correspond with the broadleaf forest zones delimited by the FAO.

Pech Land Use

The Pech habitat differentiation and classification is reflected not only in the
naming of different environmental realms, but also in their differential use of those
realms. The fundamental division of Pech resource use zones in these three areas can be
expressed in a dichotomous distinction based on vegetation cover. The Pech live in the
pine savanna of the serranía and farm the broadleaf forests of the montaña and vegas.
Most Pech settlements in their cultural core region are located in the serranía. Their
swidden fields and coffee plantings occupy sites naturally covered with the tropical
forests.

The primary Pech activity in the montaña is swidden agriculture. They believe
that the broadleaf forest occupies the more fertile soils in the area. They are therefore
willing to locate their agricultural plots some distance from their houses on sloping lands
that are more difficult to traverse and which could be prone to erosion once cleared of
the forest cover. Corn, beans, and yuca are the major food crops cultivated here. Some
rice and coffee were also observed in montaña fields.

The Pech also practice agriculture on the vega lands to which they have access.
The vegas are generally closer to their house sites and, being more level, are more
amenable to human locomotion. Indeed, Conzemius indicated that the vegas were the preferred site for what he called their “very little developed” and “small scale” agriculture (1928: 8). Comparison of aerial photographs of the upper Wampú River valley taken in each decade from 1956 to 1984 show that the vegas were the favored cultivation sites before 1960. Between 1960 and 1970 evidence of clearings in the montaña increased dramatically during that period of rapid population growth in the municipio of Culmi. Later air photos show that montaña cultivation continued to expand in the 1980s and field work in the 1990s found that the montaña continues to be cleared for new cultivation by both Pech and ladinos.

In addition to the major food crops of the montaña mentioned previously, tropical fruits are grown on the vegas. Although ladinos cultivate much coffee on the mountain slopes, the majority of Pech coffee plantings were observed on the vegas near their settlements. The majority of Pech rice is also grown on the vegas.

The serranía provides the Pech with living space. Most Pech house sites are located on the pine grasslands. Within the villages, houses are dispersed and oriented randomly. There is usually a school and sometimes an additional community center or clinic. In almost all cases the additional buildings were provided by outside agencies. Near the houses, there is often an open area suitable for a soccer field. The serranía, then, is the site of Pech housing and recreation. Compared to the montaña and vegas, very little food is produced on it. Johannessen pointed out that Hondurans have not traditionally farmed savannas, preferring instead to clear forests for agriculture (1963: 100). The Pech follow this Honduran pattern. The few agricultural plots observed on
the *serranía* in Pech villages were experimental and had been encouraged recently by development organizations.

Some subsistence activity occurs in the *serranía* in the form of dooryard gardens and the keeping of small animals, but the vast majority of food production takes place on *montaña* and *vega* lands. Even dooryard gardens are rarely as extensive or diverse as might be expected given the available land around the houses and the poverty of the people. The most common *serranía* house site dooryard plants of the Culmí area Pech are probably fruit trees such as oranges, avocados, or mangos. But again, most houses would have few or no fruit trees nearby.

The Pech cite several reasons for their failure to cultivate the *serranía*. Many claim that the soil is infertile and too acid to cultivate successfully without “técnicas agrónomas” such as the application of lime and commercial fertilizers which is not economically feasible for most Pech. They also claim that the sod is too difficult to till and prepare without at least animal drawn plows. And indeed, the *serranía* soil is noticeably harder to dig with a trowel than that found beneath the broadleaf forests. A third complaint about the *serranía* is that without fencing, anything planted there is soon eaten or trampled by the free-roaming cattle owned by neighboring *ladinos*. The attempt is made to protect even individual tree seedlings planted near the houses with makeshift fencing of boards or sticks. This explanation seems to have a good deal of merit in that the most successful *serranía* dooryard gardens were fenced off and inaccessible to the cattle (Photo 22). These successful gardens show, as some agricultural development
organizations believe, that the *serranía* can be cultivated, but at present economic and technical levels it is still not an option for many Pech.

Of course the *serranía* could also be used for grazing livestock by the Pech, as it is by *ladinos* in the area. Several Pech said that they used to own cattle in years past but that they could not protect them from thieves after the *ladino* population expanded into their area.

In addition to settlement and recreation sites, the *serranía* provides the Pech with firewood and construction materials for their houses (Photo 23). Although certain hardwood species are recognized for their superior construction properties, the *serranía* pines are also utilized. The common wooden shake roofs can be made from pine although today new roofs are often fashioned from scrap materials purchased from an area plywood mill and, in some cases, from clay tiles (Photo 24).
Photo 23. Subirana house under construction.

Photo 24. Subirana house with old and new style wood roofing materials.
The Pech settlement ecology contrasts interestingly with the settlement preferences of pioneers in the east and central United States as described by Terry Jordan. There the pioneers settled timber-prairie borders placing their houses just inside the forest, which provided construction material and fuel wood while “Fields and pastures were situated in the prairies, where no laborious clearing was necessary” (1984: 36).

Subirana Case Study

To understand better the impact of the advancing frontier and concomitant land loss on the Pech subsistence base, the relative availability of broadleaf forest and pine savanna in the Pech community of Nuevo Subirana were compared. The vegetation boundaries were interpreted from air photos and overlaid with elevation data and the Pech land boundaries (Figure 49). Area calculations show that Subirana’s provisional guarantee covers just over 35 square kilometers. Of this guaranteed land, 26.7 km², or 76.29 percent of the total, was identified as broadleaf forest lands and 8.3 km², or 23.71 percent, was identified as serranía. Given the Pech preference for broadleaf forest vegetation for cultivation, the relative percentages of approximately 3 to 1, broadleaf to pine savanna, within Subirana would seem advantageous. However, when the slope of the agricultural land is considered, and the relative percentages of montaña versus vega are compared, it can be seen that the best agricultural lands are the least available. Map measurements indicate that vega lands commonly slope less than 2° along stream profiles while montaña slopes of 10° along ridges are common and ridge to valley slopes can exceed 30°. The Subirana Pech have lost access to much of their most valuable
Figure 49. Terrain model and natural vegetation at Pueblo Nuevo Subirana.
agricultural land. In addition to the increased difficulties of farming because of the greater distance to, and relief in, montaña fields, the increased erosion potential of the more steeply sloping lands brings the long term sustainable use of the land for shifting cultivation into question.

Delimiting the Disintegrating Pech Region

Immigration and the concomitant fragmentation of the historical Pech region complicates the delimitation of their present culture region. The historic region is assumed to have met the requirement for a textbook formal region—homogeneity over an area of the earth's surface. That region would have been inhabited predominately by Pech Indians, albeit at very low density, and characterized by the Pech cultural landscape and Pech subsistence activities. If the historic region had simply shrunk in size, we would expect to be able to delimit a, still homogenous, remnant core somewhere within the old boundaries. The region was not simply attacked at its borders, however; it was infiltrated as well. That is, the Pech have not continued to retreat before the advancing ladino frontier. Rather, they have attempted to maintain access to the lands of their core settlements, gradually agglomerating into fewer and larger settlements as they were displaced from other settlements within the same zone.

The current pattern within the municipio of Culmi, then, is one of intermingled Pech and ladino settlements with the total population of Pech far outnumbered by the ladino population. It is no longer a contiguous nor a homogenous Pech region. Further, it is proportionally more ladino than indigenous and, as ladino population growth continues to outstrip Pech population growth, the proportion of Pech contribution to the
region is decreasing. Pech population and culture can be said to be dominant only within
the various Pech settlements of the region.

The eastward retreat of the Pech culture region is reflective of the advancing
national frontier. Spanish colonizers and, later, Honduran nationals displaced the Pech
from their former territory. At the beginning of this century, the Pech had withdrawn to
the eastern fringe of the 16th century culture region. The core of their region centered
on the area of the present municipios of Dulce Nombre de Culmí and San Esteban. This
core was anchored by two land titles obtained for the Pech by Padre Manuel de Jesús
Subirana in 1862. This area remains the core of the Pech region today.

Infiltration of the Pech region by national society from the west continues to
encourage eastward migration by some Pech today. A more pronounced impact,
however, has been the fragmentation of Pech lands and the dilution of Pech culture in the
once homogenous core. Pech villages are now separated from each other by intervening
zones of ladino land and culture. A meso-scale delimitation of a Pech region becomes
difficult because the area is now dominated by ladino population and culture.

Still, it must be recognized that the Pech exist and that, as a distinctive, if largely
acculturated, culture group occupying a limited area, a Pech region should be
delimitable. We can distinguish an area of the earth's surface in which Pech and Pech
activities are found in some concentration from those areas where they are not. Pech
land tenure and use provide mappable indicators of the Pech region. Variability among
communities in their relationship to the land has arisen, however, as the Pech adapt to
the changing conditions in their core. This variability further reduces Pech homogeneity and complicates delimitation.

**Pech Land Tenure**

In August 1991, the Honduran National Agrarian Institute, the agency in charge of titling lands in Honduras, granted provisional guaranties for the lands of eight Pech communities, providing a minimal legal recognition of their ownership of those lands. These guaranties add significant area to the only prior, still recognized, legal title to Pech land—that of community El Carbón. The nine parcels of Pech land with some form of legal recognition by the national government are shown on the map in Figure 50.

Four Pech settlements have no official recognition of their lands and those communities with title or guarantees often utilize lands outside of their officially recognized parcels. The community of Vallecito deserves special mention in this regard. Vallecito was granted a provisional guarantee. The land delimited in the guarantee, however, does not include the settlement nor most of the land farmed by the members of the community. Furthermore, most of the land guaranteed to Vallecito is already claimed or utilized by ladinos. Other Pech guarantees contain small enclaves of contested land but none compares to Vallecito in magnitude of the problem. Vallecito is attempting to have its guarantee resurveyed to include their village and farmlands while avoiding most contested areas but, as of mid-1992, not much progress had been made.

Obviously, some of the lands utilized by the Pech without legal recognition of their right to the land have to be included in any regional delimitation. These lands of traditional Pech usufruct include villages and surrounding cultivations that represent
Figure 50. Pech land tenure in the 1990s.
important concentrations of Pech population and culture. The inclusion of some national lands used by the Pech, however, is open to debate.

Pech Land Exploitation

Figure 51 classifies the Pech-utilized lands by mode of exploitation. It can be seen Vallecito's guaranteed lands are not exploited. Intensive land use here refers to parcels devoted to settlement and agricultural production. It does not refer to terracing nor any other method of agricultural intensification, as the Pech primarily practice shifting cultivation. The intensive category simply indicates those lands used most intensively by the Pech. Lands here classified as extensive land use areas are used for hunting, fishing, and the collection of *liquidambar*, or sweet gum resin.

The inclusion of such extensive resource use areas within the culture region of forest dwelling, subsistence Indian groups is to be expected. Typically, zones of such extensive land use are part of a contiguous region including the settlements of the exploiting group. In the case of the Pech, however, except for the zone surrounding community Las Marias which was mapped by Herlihy, extensive land use areas are separate from the villages because the surrounding lands have been occupied by outsiders. As the Pech adapt to the demographic and societal changes in the core area, their methods of subsistence and their relationship to the land has changed.

The core area Pech no longer exploit extensive land use areas frequently nor exclusively. As colonization continues and the settlement frontier has overrun the Pech core, good lands for hunting and fishing are now far away and separated by zones of *ladino* settlement. Fishing trips are taken only once or twice a year, usually to catch fish.
Figure S1. Pech land exploitation in the 1990s.

Pech Land Exploitation, 1992

- Intensive Land Use Areas
- Extensive Land Use Areas
- Liquidambar Resin Collection Area
- Fishing Area
- Las Marias Subsistence Lands (Herlihy & Leake, 1992)
- Fishing Rivers

Figure 51. Pech land exploitation in the 1990s.
to sell for Holy Week. Hunting trips in extensive land use areas are rare. They usually hunt small animals near the village during the course of other activities such as walking to fields.

The Pech' traditional extensive land use areas are shrinking as colonists settle them and put the land into agricultural production. Ladinos are also beginning to utilize these areas in the same extensive manner as the Pech, that is, for the hunting of game and the catching of fish. Exploitation by both culture groups makes these areas less definitive for delimiting the Pech region than would be the case with an exclusively Pech-utilized area.

Delimiting the Region

Two options, deserve consideration in a meso-scale delimitation of the current Pech culture region (Figure 52, Figure 53). The first creates a single large region, extending from the Culmi area northeast to include Las Mariás, and an exclave at the community of Silín. The second option recognizes a core region extending from Culmi to El Carbón with two exclaves—Silín and Las Mariás. This delimitation is preferred. It takes into account the separation between Las Mariás and the core not only by the leading edge of the ladino frontier but also by a large, still uninhabited, tropical forest. It also recognizes the decreasing utility of the extensive land use area for defining a distinctive Pech culture region.

As it has in the past, the Pech region will likely continue to change in the future. The fulfillment of the desire of some Pech to move east into the forests separating the core area from Las Mariás may one day bridge the gap between these areas, creating a
A Maximal Delimitation of the Modern Pech Culture Region

Figure 52. Maximal delimitation of the 1990s Pech region.
Figure 53. Minimal delimitation of the 1990s Pech region.
culture region similar to the one described in the first delimitation option. If that gap is to be bridged, however, it is much more likely that the ladino colonists will be the ones to do so, as they continue to move into the Pech core area and beyond.
CHAPTER 9
Indigenous Lands Become Ladino

The frontier of settlement and economic activity in Honduras cuts a north-to-south swath across the eastern part of the department of Olancho. More eastward, beyond the frontier, is a zone of sparsely inhabited land, much of it tropical rain forest. This is a hollow frontier, however, for as you continue eastward, the population concentration increases again in the coastal villages and riverine settlements of the Mosquitia littoral (Figure 54).

The modern frontier has advanced eastward only slightly beyond the western limits of colonial Taguzgalpa, that eastern portion of what is today Honduras which remained outside of the control of Spanish authority (Figure 36). Colonial efforts to evangelize the native peoples of Taguzgalpa and to settle them in reducciones were only temporarily successful and by Independence in 1821, the area was still outside of effective Spanish control.

Olancho, Past and Present

Although Olancho still contains portions of Honduras’ eastern frontier, it was, paradoxically, one of the earliest sites of Spanish settlement in the country. After the founding of Trujillo on the north coast in 1525, the Spaniards sought to establish an inland settlement that would help improve their access to, and control over, Indian
Figure 54. Aldea populations of eastern Honduras in 1988.
populations and gold deposits, and to establish a claim to the interior in response to competing Spanish incursions into the area from the south.

Gold again attracted Spanish settlement to Olancho during the period when placer mining was dominant in Honduras between 1530 and 1560. The Guayape placers were reported to be the richest in Honduras and led Bishop Pedraza to proclaim Olancho, considering both its gold and agricultural potential, “to be the richest area in all of Central America” (Davidson 1991: 215).

As gold production diminished along the rivers of eastern Honduras, due in no small part to the decline of available Indian labor, the port of Trujillo declined in importance and the seat of the church was moved to Comayagua by 1558. The Olancho Valley shifted from a position of economic importance within the hinterland of a major port to one of a peripheral frontier of Spanish-controlled territory. Ranching appears to have become the dominant economic activity in the valley after the gold industry declined and Spanish settlement attentions turned elsewhere. Only in recent years have these regional landscapes of an isolated ranching zone along the frontier begun to be significantly altered by increasing contact and integration with the rest of Honduras.

Today, Olancho has the fifth largest population among Honduras’ eighteen departments. It ranks first among Honduran departments in the categories of area cultivated and area in pasture, as well as in the production of corn, beans, sorghum, soybeans, cattle, swine, and equine species. It is a department of both large and small agriculturalists and cattle ranchers. Olancho’s frontier heritage and cattle ranching ethos is seen in the prominence of activities sponsored by cattlemen’s associations during the
celebration of férias patronales such as livestock shows, exhibits of modern agricultural machinery, and bullfights, which are typically more akin to the North American rodeo event of bull riding than to the Spanish version of corridas de toros.

The development of Olancho into an important supplier of agricultural products for national and international markets has been prompted in large part by the extension of improved roads into the department from the national core and the north coast. The Carretera de Olancho reached Juticalpa and Catacamas in the Guayape valley in the 1950s, and a sharp increase in their populations followed shortly. Secondary roads, which first arrived in Culmi in the early 1960s and in El Carbón around 1980, have also opened the once-isolated lands of northeastern Olancho for colonization and development.

The maps of population change presented previously further illustrate the recent growth of the eastern frontier zone, showing it to be one of only a few areas of the country where the population more than doubled between 1974 and 1988. During the prior intercensal period, between 1961 and 1974, the population of municipio Culmi increased by over 573 percent. This is by far the greatest percentage increase of any Honduran municipio for any census interval since at least 1945. Pech population growth has not kept pace with the ladino population growth in the municipios of the Pech region during the second half of the century and the Pech have become an increasingly smaller minority even within the Pech core municipios (Figure 55).
Change and Its Impact Upon the Pech

The growth and development of Olancho during the twentieth century must be viewed as a positive thing for the country of Honduras. The phenomenon has not been without its negative consequences, however, among which are threatened natural environments and native peoples, in particular, the Pech and their lands.

The names of a great variety of indigenous groups were recorded by the colonial Spanish as inhabiting the area of modern Olancho, but the primary aboriginal inhabitants at Contact, in terms of area occupied and of modern survivals, were the Pech, who occupied central and northeastern Olancho.

At Contact, of course, all of the population of eastern Olancho was of indigenous origin. Since the arrival of the Spanish, the ladino component of the population, and the proportion of the territory under their control, has gradually increased. In eastern Olancho, the increase of ladino presence has been most dramatic in the second half of this century. As noted above, the municipios of eastern Olancho are only now becoming firmly integrated into the national sphere.

The ladino component in eastern Olancho began its dramatic increase after the establishment of road connections from Catacamas in the early 1960s, at first to allow the extraction of timber from the area. From the single aldea in existence at the time of the creation of municipio Culmí in 1898, the number had grown to 12 by 1974; by 1988, there were 27 aldeas. Recent impacts of Olancho’s development on native peoples are seen most prominently among the Pech concentrated in two upland valleys in the municipios of Dulce Nombre de Culmí and San Esteban. Until recently, the Pech
Figure 55. Population histories of the Pech core municipios.
position on the margins of national society buffered them somewhat from the influences of the ladino socio-economic system. They retained control over a contiguous and culturally unified remnant of their pre-Columbian territory spanning the Culmi-San Esteban border until the 1960s. These municipios continue to contain the core of the modern Pech region. Today, however, the surviving Pech region is fragmented and reduced in size even from its 1960 area (Figure 56). There are additionally two outlying, lowland zones of Pech occupation which are separated from the Pech core; the settlement of Silín, near Trujillo, and the zone of Las Marias on the Río Plátano. Today the Pech number just over 1,900, almost 90 percent of whom live in the core settlements of the upland valleys.

Traditionally, the Pech have practiced a largely subsistence lifestyle based on farming crops such as corn and yuca, hunting and fishing, and occasional sales of agricultural and forest products. The extensive land use of the Pech shifting cultivation and hunting-gathering subsistence economy, combined with their ill-defined land tenure and demarcation, encouraged ladino usurpation of land for individual ownership and exploitation once road access was established to the area.

Within the boundaries of the Pech communities, the inhabitants conceptualize land tenure in what may be assumed to be their historic manner. The Pech describe their land tenure system as one of communal ownership with individual exploitation of parcels within the communal boundaries. Land is generally available for exploitation by any member of the community. Utilization of a parcel establishes it as an individual’s land
Figure 56. Pech territorial reduction since Contact.
while abandonment makes it available for exploitation by other members of the community.

Such a laissez-faire approach to land ownership and use served adequately when the region was thinly populated and regulated by Pech cultural traditions and social mores. The rise to dominance of Honduran social and legal control, and the increased competition for land, however, meant that ladino concepts of land ownership took precedence. Conflicts over land would now be settled by legally recognized structures and Pech impotence in the new political structure meant that most cases would be decided in favor of ladinos.

As the land available for use by the Pech has been further reduced and the Pech core region has become fragmented and culturally diluted through the ladino occupation of lands surrounding and lying between the various Pech communities, the Pech have been forced to seek legal recognition of their land rights from the national government. While most of the Pech settlements were awarded provisional land guarantees by the Instituto Nacional Agrario in 1991, they still struggle for full legal title to those lands.

Incorporation into the national society has cost the Pech control over most of their core area and transformed much of their traditional culture. They no longer dress distinctively, and use of their native language is decreasing. As access to extensive hunting and gathering lands has been lost, the Pech have had to increase their dependence upon cultivation at the same time that the choice agricultural lands along stream courses were being claimed by the newcomers. The provisionally guaranteed lands of the Pech community of Pueblo Nuevo Subirana, for example, were found to
contain relatively little valley-bottom *vega* land, with the result that most of their cultivable land lies in the steeply sloping *montaña*.

The Pech are undergoing a process of adaptation to the changing sociocultural conditions in their region. Their geographic situation buffered them from initial intense contact with *ladino* society. Their subsistence-oriented cultural ecology and indefinite land tenure system, however, encouraged land usurpation by *ladinos* who were pushed into the area by increasing population pressures in the west and pulled by developing markets for the products of the Pech region.

In response to land loss the Pech are seeking to secure access to sufficient farmland and often find it necessary to increase their involvement in the national economy. Migration to areas of available land, both to other Pech villages and to unoccupied lands, continues to be one strategy for maintaining access to sufficient land for cultivation. Seeking legal recognition to the land they currently occupy is another strategy. Some Pech have purchased land for their individual use and some villages are forced to rent lands to subsist.

Incorporation into the national economy also proceeds as a means of adapting. Most Pech men are forced to work as occasional day laborers for *ladino* neighbors. More Pech are planting coffee to sell commercially, and many sell surplus agricultural produce and pigs when production is sufficient. From the forests, the Pech collect *liquidámbar* resin and catch fish to sell for the traditional Honduran Holy Week meals.

Pech acculturation to *ladino* ways and incorporation into *ladino* society will almost certainly continue as *ladino* dominance expands in the Pech core. Any hope for
the survival of a distinctive Pech culture seems to lie in their ability to acquire secure access to sufficient land that will allow the Pech to maintain some degree of isolation and independence from the national society. Without firmly established ownership of their own lands, there is little apparent hope for the long term cultural survival of the Pech.
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VITA

James Richard Samson was born on July 19, 1961, in Baton Rouge, Louisiana, and was raised in the small town of Clinton, Louisiana. Numerous activities and experiences during those formative years established interests and provided knowledge and skills that contributed both to his decision to pursue post-graduate study of Latin American geography and to the successful completion of that endeavor. As the son of the Cooperative Extension Service's Parish Agent, his exposure to agriculture and rural life was an early and continuous influence upon his developing interests that led to course work in the agricultural sciences and part time employment in agricultural work during his high school and undergraduate years. Outdoor living skills acquired in the course of earning the rank of Eagle Scout helped to prepare him for certain non-academic aspects of conducting research in remote areas of Central America and served, if not to insure survival, at least to provide a measure of confidence and comfort during stays in Pech villages and on treks by trail and river through eastern Honduras. His attendance, and that of his older brother and younger sister, in the poorly-integrated public schools of Clinton taught him early and enduring lessons in cross-cultural relations and gave him an appreciation for, and sensitivity to, the nature of being a member of a minority group within a society. Clinton's schools also provided his first opportunity to travel internationally and to experience first hand the cultures and landscapes of Latin America through two trips to northern Mexico organized and led by a teacher, Mr. Lindley Orr, during his tenth and eleventh grade years. He graduated as Valedictorian of Clinton High School's class of 1979.
He enrolled in Louisiana State University in the fall of 1979 already well acquainted with the campus from participation in numerous livestock shows and student conferences and conventions in earlier years. He was also somewhat familiar with the facilities of the Department of Geography and Anthropology from his family’s religious attendance of L.S.U. football games for as long as he can remember. Many autumn Saturday night treks to Tiger Stadium in his youth began from a parking space on the lawn that is now the foundation of the East Wing of the Howe-Russell Geoscience Complex and passed through the old Geology Building, now part of the Geoscience Complex and home to the offices of the Department, for a bathroom stop and perusal of the exhibits of the Museum of Geoscience. He did not enroll in a course from the department for several years, however, as his undergraduate studies concentrated initially in agriculture and education. He later abandoned that curriculum and began a concentration in the social sciences that led him to courses in sociology, anthropology, and geography. A two month stint working for the National 4-H Centre in Belmopan, Belize, in the summer of 1983 greatly expanded his knowledge of and interest in Central America. He was elected to membership in Phi Kappa Phi and graduated with a degree in General Studies in 1984.

Upon graduation he spent a year traveling occasionally and working odd jobs in renovation and landscaping with a friend and recent master’s graduate in herpetology, Mr. Bill Sanderson. In 1985, he began a year of nonmatriculated graduate study in geography and sociology that included a course on the geography of Central America taught by Dr. William Davidson which later proved to be the primary influence in his
choice of a research focus and major professor for his graduate degree. The year also produced another defining moment in his life, his marriage on the evening of October 18th to Ms. Amy Elizabeth Vidrine after studying throughout the night for Dr. Kam-Biu Liu's noon mid-term exam in biogeography.

He spent the 1986-87 academic year attending Austin Presbyterian Theological Seminary in Austin, Texas, during which time he decided to pursue graduate studies in the field of geography. He returned to L.S.U. with a graduate assistantship in the Department of Geography and Anthropology in January of 1988 with the intention of earning a master’s degree in Latin American cultural geography. At the Department’s suggestion, he elected to bypass the master’s degree and began working toward a doctorate in January of 1989. He received a Fulbright Fellowship for a year of field work in Honduras in 1991-92.

He is the son of Sandra P. Samson and the late Clay M. Samson of Clinton, Louisiana, and the brother of Clay M. Samson, Jr. and the late Laurie Kay Samson. He is married to Amy Elizabeth Vidrine of Ruston, Louisiana, and the couple has two children, Clayton Richard Samson and Jacqueline Noel Samson.
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