AN ETHNOGEOGRAPHY OF THE MALEKU INDIGENOUS PEOPLES IN NORTHERN COSTA RICA

by

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ABSTRACT Roberto Castillo Vásquez, Ph.D. Department of Geography, December 2004 University of Kansas

This dissertation in cultural geography documents and explains the culturalgeographic changes undergone by the Maleku indigenous peoples over the last 130 years. Fieldwork took place among the three communities of the Guatuso Indian Reserve in northern Costa Rica over six months. The methodology included archival research and ethnographic research and with the collaboration of local investigators conducted a census, collected toponym information, and carried out field mapping.

This dissertation shows that around mid-19th century the Maleku controlled a territory of approximately 100,000 hectares in the Río Frío watershed, with an estimated population ranging from 1,500 to 2,000 people, who were distributed in seventeen dispersed riverine communities. Maleku's livelihood depended primarily on tubers, plantain, peach palm, and cacao, supplemented with hunting, fishing, and gathering activities. Over the last 130 years the Maleku historical lands were reduced to 600 hectares, their population plummeted to 386 people, the number of communities decreased to three, and their subsistence ways of life were replaced by market oriented activities. In addition, the Maleku experienced loss of cultural elements such as traditional dress, houses, music, dances, food taboos, and customary social and political organization. Several factors have contributed to these changes including the actions of the Nicaraguan rubber gatherers, the expansion of the Nicaraguan and Costa Rican settlement frontier, the housing, education, and development programs of the Costa Rican government, and the indoctrination process by different religious groups.

Despite practically losing all their historical lands and resources, the Maleku people still maintain their indigenous identity based on cultural elements such as language, religion, oral tradition, crafts, burial customs, and self-identification. Some of the reasons explaining the survival of the Maleku include: the adaptation of the Maleku to the needs of the dominant cash economy, the establishment of the Guatuso Indian Reserve in 1976, the assistance of state's institutions and non-government organizations, the relative isolation enjoyed by the Maleku communities until the 1980s, the implementation of bilingual education programs, the late arrival of different religious groups, and the development of an indigenous self-identification movement in the 1990s. This dissertation concludes that even if the Maleku were able to remain in their communities and get reserve lands back, crucial cultural elements such as language, religion, oral tradition, and burial customs that defines their cultural identity today, will be probably gone in about 30 or 40 years because of religion indoctrination and miscegenation.

Preface and Acknowledgements

My interest in indigenous peoples goes back to my undergraduate training in geography at the University of Costa Rica. During field trips to some of the Indian Reserves, I was amazed by the distinctive way of life of the indigenous peoples. As a *mestizo* from a small Central Valley's town, raised in a relatively cultural homogeneous environment, I was impressed by the striking differences in language, religion, house styles, livelihood activities, as well as in the social and political organization of the different peoples of Costa Rica. Over the years, I became personally concerned with issues directly relating to indigenous peoples in Costa Rica. As a professional, I learned that few Costa Rican geographers had devoted time to study and understand the fascinating indigenous world.

My first opportunity to work with an indigenous group came in 1991-92 while participating as an investigator for the research project "Border Regions," sponsored by the MacArthur Foundation and executed by the Confederation of Central American Universities (CSUCA), Costa Rica. As part of my research duties, I conducted fieldwork on the Maleku communities of the Guatuso Indian Reserve over four months during 1991-92. By conducting interviews and talking to the people, I learned about the indigenous group's past. I also learned about present-day problems affecting their communities: land dispossession, loss of natural resources, poverty, unemployment, prejudice, and acculturation. This field experience also gave me the opportunity to make new friends and to find out how fascinating and encouraging, but tragic at the same time, the culture history of the Maleku has been.

The Maleku, the smallest of the eight indigenous groups that still survive in Costa Rica today, provide an excellent example of the persistence and struggle of a cultural group to continue practicing a distinctive way of life amid great change and disruption over the last 130 years. By the end of the 19th century, they were almost exterminated by rubber gatherers, who killed many of them and enslaved and sold their children and young women as slaves in Nicaragua. During the 20th century they have been subjected to the indoctrination of the Catholic and Protestant churches, to the expansion of the Nicaraguan

and Costa Rican settlement frontier over their historical lands, and to the Costa Rican state policies to acculturate and assimilate them into the national culture. Despite all these powerful external forces, the Maleku have been able to survive culturally and physically, in small numbers, but still, very much alive. It is this historical courageous struggle for survival that fascinated me about the Maleku in the first place.

My continuing interest on indigenous peoples brought me to Talamanca in the southeastern part of Costa Rica in 1993. For two years an anthropologist and I conducted a research project among the Bribri and Cabécar indigenous groups of the Talamanca Indian Reserves. This research project was financed by the Danish government and consisted of studying the indigenous livelihood activities and explaining their recent changes. Despite my commitment to the Bribri and Cabécar of Talamanca, whenever there was a chance I visited my Maleku friends at the Guatuso Indian Reserve and always kept open the possibility for a future research joint venture. For this reason, when the moment came to select a topic for my dissertation research, the only choice for me was the Maleku. This dissertation research finally offered me a unique opportunity to study this indigenous group and to achieve a long-standing academic and personal goal.

Many people and institutions deserve thanks for their help during the research and writing of this dissertation. I would like to express my deep gratitude to the residents of Tonjibe, El Sol, and Margarita palenques of the Guatuso Indian Reserve for their cooperation and support. They were very kind in accepting my presence in their communities and houses, for answering my questions patiently and for letting me participate in their daily activities. I am especially thankful to the local investigators Bienvenido Cruz, Francisco Elizondo, and Eligio Cruz for their hard work and enormous contribution toward the conclusion of this research. I would also like to thank the following people for their acceptance to be interviewed: Nicanor Cruz, Wilson Morera, Leonidas Elizondo, Eustaquio Castro, Lorenza Cruz, Emilce Elizondo, Luciano Castro, and Dolores Sequeira. Finally, I want to thank Rosa Elizondo and Leonidas Elizondo of Tonjibe for their hospitality during the time I lived in their house. They are remembered fondly, with appreciation for their willing participation.

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1. Introduction

1.1 Research Problem

After 500 years of contact with Europeans and Hispanic-Americans, the indigenous peoples in Central America, like those in the rest of Latin America, have experienced similar dramatic changes in their societies, cultures, and geographies. Researchers from different disciplines, including cultural geographers have studied these changes among different indigenous groups in Central America.

In general most indigenous groups have faced similar processes such as loss of lands, resources, and customary subsistence activities, relocation, depopulation, and acculturation. However, the degree of impact caused by the European expansion has not been the same for all the indigenous groups. The contact and conquest history varies from one group to another. Some indigenous groups became extinct due to diseases, slavery, warfare, forced labor, and maltreatment. Other groups were assimilated into the Spanish and Hispanic-American society through miscegenation, religious indoctrination, and state integrative policies. Still other groups managed to survive by armed resistance, rebellions, and by remaining relatively isolated for a longer time, particularly in the Caribbean slope, where the Spaniards never established permanent control.

About forty-five distinct indigenous populations still survive in Central America in 2004, identified by their distinctive cultures, settlements, and subsistence activities. These indigenous populations are the poorest and most disadvantaged segment of the Central American population. Even in Guatemala where they constitute a considerable ethnic majority in the total population, they have been excluded from overall economic development, social services, and legal protection. They are also struggling to preserve their cultures against discrimination, involuntary acculturation, and policies of assimilation. One of the most crucial and immediate threats to surviving indigenous peoples is loss of lands and resources to agricultural colonists, mining, oil, timber, and hydroelectric companies. For many indigenous peoples their economies and cultures are tied to their historical lands and resources. The relationship to land is not only a material one, but also one deeply spiritual

and full of respect. Therefore, the loss of ancestral lands and resources by the indigenous peoples are threatening not only their economic livelihood, but also the environmental basis of their distinctive cultural identities. Some governments have been working to set up reserve lands for their indigenous populations. However, with few exceptions, these reserves are not physically demarcated, and lack legal protection, being unable to prevent mestizo colonization and other outside pressures.

In general, indigenous peoples have survived as distinctive ethnic groups where they comprise a large and growing population, as in western Guatemala, or where they occupy extensive territories, particularly in the Caribbean slope. However, Costa Rica provides a good example in Central America, where a small indigenous population has managed to survive physically and culturally despite losing most of their ancestral lands and resources, and suffering strong acculturation and assimilation forces. Costa Rica's indigenous peoples once numbering perhaps 400,000 inhabitants have been reduced to about 64,000 people, making up 1.7 percent of the country's inhabitants (Denevan 1976:291; INEC 2002). The surviving native population is divided in 8 different indigenous groups: Bribri, Cabécar, Boruca, Guaymí, Térraba, Huetar, Maleku, and Chorotega. They live in 22 reserves legally known as "Indian Reserves," covering an area of 324,821 hectares. The indigenous law of 1977 legally recognized Indian Reserves established in the last 45 years. However, violation and lack of demarcation of reserves and enforcement of indigenous legislation have allowed outsiders to take over reserve's lands and resources, destroying indigenous ways of life.

Today, less than 60 percent of reserve lands remain under indigenous control. Besides losing lands to peasant farmers and cattle ranchers, the indigenous peoples face new dangerous threats: the development of oil perforations, illegal lodging, mining exploitation, and hydroelectric projects in their lands. In addition to the problem of land usurpation and encroachment, there is also a significant amount of non-Indians living in the reserves, around 18 percent, which has increased the process of miscegenation and acculturation of these indigenous groups (INEC 2002). Costa Rica's indigenous groups, with the exceptions of the Bribri, Cabécar, and Guaymí, despite being small populations, having lost most of their historical lands, and controlling only small amounts of their current reserve's lands, still survive as distinctive cultural groups. The Maleku, the smallest and the only remaining indigenous group in northern Costa Rica, provides the best example of the persistence and struggle of a cultural group to continue practicing a distinctly indigenous way of life amid great change and disruption over the past 130 years. They live in the 2994-hectare Guatuso Indian Reserve established in 1976 in the northern part of the country. Today there are about 380 Maleku people divided in three neighboring communities: Margarita, Tonjibe, and El Sol, which are easily accessible by unpaved and paved roads.

The Maleku is one of the indigenous groups whose continued identity is most threatened in Central America today. Their culture history is quite different from other native peoples in the region for at least five reasons. First of all, they were the last indigenous peoples to be discovered by the Spaniards in the colonial period, apparently not being contacted by them until 1778 (De la Fuente 1938: 547; De Paula Soto 1976a:299; García Peláez 1852:144). Their late discovery permitted them to escape direct Spanish genocide and ethnocide. Indirect introduction of deadly Old World diseases had untold impacts on their number. Secondly, the Maleku are among the few indigenous groups in Central America never conquered by the Spaniards during colonial times. They successfully repelled the attempts made by soldiers and missionaries to subjugate them in the eighteenth century, retarding their acculturation until the nineteenth century (Betancourt and Constenla 1981:29-30; De Paula Soto 1976b:291-293; García Peláez 1852:146).

Thirdly, this indigenous group was the last one to enter into permanent contact with outsiders. The first permanent contacts with outsiders seems to be in 1868 when Nicaraguan rubber gatherers attracted by the numerous rubber trees invaded the native ancestral lands (Figueroa 1885a:24; Frantzius 1925:229; Thiel 1896a:13; 1896b:69,73). The commercial extraction of rubber or rubber boom, which extended from 1868 to around 1900, marked the beginning of a long process of cultural and geographic changes for the Maleku. Fourthly, they may be the only indigenous group in Central America that was still openly enslaved during the late 19th century, despite that slavery had been abolished in 1834. The Nicaraguan

rubber gatherers captured young indigenous women and men, took them to Nicaragua, and sold them as slaves. The armed resistance of the Maleku against the rubber gatherers tragically ended with hundreds of the indigenous men being killed. These rubber gatherer actions, including the stealing of foodstuffs and the introduction of diseases, disrupted the entire indigenous society and led to their near extinction by the end of the 19th century (Belt 1911:35; Carmona 1897:151-151; Fernández 1882:675; La Gaceta 1882:1273,1301,1312; Thiel 1896a:14,21; 1927:118-120).

Finally, the Maleku is probably one of the few, if not the only, indigenous groups in Central America who was able to recover from an imminent physical and cultural extermination. As a result of the rubber gatherer actions in the 19th century, and subsequent problems of diseases and alcoholism in the following years, the Maleku population declined to only 127 people in 1923 (Céspedes 1923:120). Considering their small population and poor living conditions, late 19th century and early 20th century visitors believed the Maleku were doomed to extinction. However, they experienced a small recovery in their population throughout the 20th century, despite suffering high mortality rates and losing most of their ancestral lands and resources.

As will be detailed below, this research shows how the Maleku have suffered in the last 130 years a significant loss of lands and resources, population, settlements, customary livelihood activities and related practices, as well as material culture elements. The establishment of the Guatuso Indian Reserve in 1976 and related legislation has proved to be insufficient to secure indigenous lands. This research shows the Maleku control now only 20 percent of the reserve. Moreover, since the 1950s there has been an increase of different church denominations, government, and non-government institutions implementing housing and top-down development projects, imposing Spanish language and religious beliefs, and banishing long-time traditions. These agents of change are forcing the Maleku to abandon their indigenous groups in Costa Rica, the Maleku have the highest percentage of landless families and the highest unemployment rate. They control the lowest amount of reserve's lands, and are outnumbered by non-indigenous peoples living in their own reserve, with miscegenation an everyday occurrence.

Dealing with demographic, socio-economic, and resource limitations, and facing powerful external forces, it is becoming more difficult for the Maleku to survive as an indigenous group. However, despite suffering enormous population and territorial reduction, and cultural disruption in the last 130 years, the Maleku still preserve aspects of their culture that distinguish them from their non-indigenous neighbors. If control of lands and resources is an essential and decisive factor for the indigenous peoples living in rural areas to secure their economic livelihood and to maintain their cultural identity, the small Maleku population has proved the opposite. Without a secure land-base for quite some time now, they have been able to survive and retain their cultural identity. This particular situation sets the Maleku somewhat apart from the rest of Central American indigenous groups, which make them highly attractive to study.

1.2 Objectives of the Study

This dissertation research is a cultural geography of the indigenous Maleku peoples living in the Guatuso Indian Reserve in northern Costa Rica. The research focuses on one overall objective and four specific objectives.

The overall objective explores the relationship between land and indigenous cultural identity. The main purpose, using the Maleku case, is to show that a small indigenous group has survived and maintained its cultural identity despite losing practically all its historical lands and resources. This challenges the general idea that access to and control over lands and resources are the basis or the core for indigenous people's physical and cultural survival. If possession of lands and resources has not played a significant role, then, how have the Maleku been able to survive as long as they have? What are the factors contributing to the Maleku's cultural persistence and endurance?

The first specific objective is to explore and record the culture history of the Maleku indigenous people. The aim is to piece together the oral tradition, linguistic, genetic, archaeological, and historical data available to establish the cultural and geographical origin and dispersal of the Maleku people. The second specific objective is to explain the reasons why this indigenous group remained unconquered throughout the conquest and colonial

5

periods, despite Spanish attempts to subjugate them. The third specific objective is to reconstruct the geography of the Maleku's lands, population size, settlements, and subsistence activities in the mid-nineteenth century prior to the arrival of the Nicaraguan rubber gatherers in 1868 by focusing on four key aspects: the cartographic reconstruction of their historical lands, the estimation of their population size, and the description of their settlement and customary subsistence activities. Finally, the fourth specific objective is to document changes in these four aspects of the Maleku people over the last 130 years. The aim is to use the reconstruction of Maleku's population, lands, settlements, and subsistence activities as a baseline in order to document the magnitude of changes undergone by these four aspects since 1868. In addition, it aims to illuminate some of the processes causing such changes and some of the factors contributing to the cultural continuity of the Maleku.

The literature on indigenous peoples of Central America does contain a few examples of indigenous groups that after losing their land base and resources have been capable of maintaining their indigenous cultural identity. In general cultural geographers studying indigenous peoples in Central America have not looked closely into the relationship between indigenous cultural identity and their environment. However, there is a consensus that the possession and control of ancestral lands and resources is a decisive factor in maintaining indigenous customary livelihood and cultural identity. For some particular indigenous groups such as the Pech, Tawahka, Lenca, Tol, and Garífuna of Honduras, the Emberá and Wounaan, Guaymí, and Teribe of Panama, the Bribri and Cabécar of Costa Rica, and the Rama of Nicaragua, geographers have demonstrated that the reduction of ancestral lands and resources has resulted in the loss of cultural identity. The dispossession of indigenous lands by outsiders have caused changes in many of their cultural aspects such as dress, the increase involvement in wage labor and commercial activities, the decrease in the use of native language and religion, the loss of hunting and gathering subsistence activities, and changes on settlement patterns (Borge and Castillo 1997; Borge and Villalobos 1994; Davidson 1976a; 1976b; 1985; Davidson and Cruz 1995; Gordon 1982; Herlihy 1985a, 1985b, 1986, 1993; Nietschmann 1974b; Samson 1997; 2002; West 1958; 1998).

Other scholars, particularly anthropologists working with indigenous peoples in Central America, have only vaguely discussed the relationship between land and identity. Drawing from their experience with Garífuna, Afro-Nicaraguan, and Miskito communities on Nicaragua's Atlantic coast, anthropologists agree that access to and use of the land have been important bases for these Nicaraguan coastal communities to construct their own identity (Gordon, Gurdián, and Hale 2003). Access to resources provides the symbolic and material power to indigenous peoples to affirm connections with their narrative of the past. However, as indigenous peoples lose access to lands that once was theirs, they not only lose the basis to make the case for getting it back, but also to weave their memories into a coherent narrative of the past. Another anthropologist working among the indigenous Sumu and Miskito (Mayangna) in Nicaragua's Bosawas Reserve believes that control of one's own natural resource base is a powerful factor of identity, and argues that ethnic identity itself is a way of talking about access to lands and resources. He refers to indigenous groups in Central America overrun by peasant communities, dispossessed of their native lands, but still located in part of what was their homeland that retain a weak indigenous identity, but without native language or much distinguishable cultural content. When access to resources cannot be controlled and outsiders excluded, the costs and benefits of maintaining ethnic identity are weighed in each individual case, often with disastrous results for identity (Stocks 2003).

Indigenous peoples populate parts of every continent and most countries. The extreme variations in their lifestyles and current circumstances defy simple definition. However, many indigenous peoples share a number of characteristics that help describe, if not define them. They are typically descendants of the original inhabitants of an area taken over more powerful outsiders, most often before modern states were created. They maintain unique and closed cultural affinities and attachments to traditional habitats, ancestral territories, and natural resources. They are distinct from their country's dominant national group in language, religion, and material and spiritual culture. They possess social, cultural, economic, and political traditions and institutions distinct from the national society. Most think of themselves as caretakers and users, not owners, of the land and other resources, and partly defined themselves by the habitat from which they draw their livelihood. They

commonly have subsistence economies. They identify themselves as being part of a distinct indigenous cultural group (Durning 1992:8; Kingsbury 1995:33).

The cultural identity of a specific indigenous group at a given place and time depends upon all or some of these defining characteristics. Of particular interest is the relationship between the indigenous land and indigenous identity. Land is often mentioned as the key to cultural and even physical survival of indigenous groups (Bodley 1982:34; Maybury-Lewis 1985:137). The question is what makes land so vital for indigenous peoples to maintain their cultural identity? The answer is apparently related to the deep relationships that indigenous peoples have established with their lands. Living on and from their lands for many generations, indigenous peoples have developed their own culture, history, ways of life, and identities grounded in these places. Most native people are bound to their land through relationships that are practical, spiritual, and historical. They have come to know the land through the timeless repetition of daily routine, have imbued it with meaning through the long elaboration of myths and legends, and have defended it in the defining events of their cultural past (Durning 1992:15).

Historic land is also considered the source of life, the identity and shelter of the cultural personality of the indigenous peoples. Although the earth provides the necessary means for material survival, the relationship to the earth is deeply spiritual and full of respect. For indigenous peoples the earth is the center of the universe and constitutes the core of their origin and identity as a people. The earth connects them with their past (as home of the ancestors), with the present (as provider of their material needs), and with the future (as the legacy they hold in trust for their children). In this way, indigenousness carries with it a sense of belonging to a place (Burger 1990:20). Among some groups cutting trees, cultivation and other uses of land and nature resources may be preceded by religious beliefs manifested in rituals of offering, spiritual cleansing, and prayers to get permission and blessing from gods or nature spirits for the actions planned. For some groups, another supernatural bond to the land can be the close relationship to ancestors, who once inhabited the same area and were buried there and whose spirits are believed to be present (Pirttijarvi 1999:16). In addition, indigenous peoples have generations of experience with land use practices that carefully adapted to local conditions. And they tend to care deeply about what

become of these places and the life in them, not only because they have emotional and spiritual attachments to their homelands, but also because their own ways of life and identities as peoples often are at stake. Encoded in indigenous languages, customs, and practices may be as much understanding of nature as is stored in the libraries of modern science (Durning 1992:7)

In summary, since indigenous peoples' ways of life and cultural identity are tightly linked to particular territories and places, and to specific ecosystems and natural resources, their ways of life and their continued existence as peoples are threatened by the loss over their lands and their livelihood, and by the destruction of the environmental basis of their distinctive cultures and identities. When indigenous peoples lose their lands, they usually lose their language, their complex social and political systems, traditions and sacred beliefs, and their knowledge. As the Mexican sociologist Rodolfo Stavenhagen pointed out, "an Indian without land is a dead Indian and an ethnic community without language is a dying community" (Burger 1990:122). If this is the case, how can we explain the cultural survival of the Maleku indigenous peoples of Costa Rica without having practically any lands or access to natural resources?

1.3 Justification of the Study

The Maleku is not only the smallest, but also the least known and least studied group in Costa Rica. Studies on this indigenous group are scarce and limited to some specific cultural complexes such as language, religion, house type, and kinship systems. No scholarly efforts have been made to document and explain the past and present sequence and magnitude of territorial, demographic, and cultural changes experienced by the Maleku. Considering the lack of popular knowledge about the group, this research hopes to contribute to a more complete understanding of their past and present life situation by undertaking a comprehensive cultural-historical geographic study of the Maleku from contact time to its present situation. This study also hopes to collect and produce a broad range of geographic, ethnographic, and cartographic information as an addition to the generally scant published documentation on the Maleku. It is expected that this information would serve as a sound foundation for future studies.

In Central America, and particularly in Costa Rica, there are few detailed culture histories of indigenous groups done by geographers, with the exceptions of the Miskito, Pech, Tawahka, Kuna, Guaymí, Emberá and Wounaan, Garífuna, and some Maya groups discussed below. Thus, there are still indigenous groups whose culture histories need to be investigated, offering rewarding research opportunities. More comprehensive studies on existing indigenous groups, like the study undertaken here, are needed to broaden our knowledge and understanding of the past and present situation of the indigenous peoples in Central America. In addition, this cultural-historical geography of the Maleku indigenous peoples contributes to understandings of different patterns and dynamics of indigenous population size, distributions, and cultural survival in Central America today.

Beyond its academic structure, this dissertation hopes to tell the story of the Maleku and their history of struggle for survival amid great change and disruption during the last 130 years. The Maleku offers a unique opportunity to write their cultural-historical geography not so much from written sources, but from directly working with them using geographic, ethnographic, and collaborative research methods.

1.4 Structure of the Dissertation

Following this introduction, Chapter 2 provides a description of the physical and cultural setting of the Maleku people and reviews past research on this group. Chapter 3 describes the cultural-historical approach and reviews past research on indigenous peoples of Central America, followed by a description of the research methodology in Chapter 4. The next chapter provides an overview of the different hypotheses concerning the origins of the Maleku people. Chapter 6 documents the events leading to the discovery of the Maleku and explains the factors contributing to their survival throughout the conquest and colonial times. The next chapter describes the geopolitical, international, and national events leading to the opening of the Maleku culture and territory to the outside world. Chapter 8 focuses on the reconstruction of Maleku's historical lands, population size, settlements, and livelihood strategies around mid-nineteenth century. Chapter 9 documents the commercial extraction of rubber and the Catholic missionary incursions in the Río Frío watershed during the last three decades of the nineteenth century and describes their impacts of the Maleku society.

The next three chapters document and explain the geographic, demographic, and cultural changes experienced by the Maleku between 1900 and 2000, followed by a summary of the research findings and some concluding remarks in the final chapter.

2. The Biophysical and Cultural Context

The Maleku have traditionally lived in the Río Frío watershed, northern Costa Rica, an area that is part of the "Llanuras de Guatuso," or Guatuso lowlands, named after the Guatuso indigenous peoples. The Spaniards back in the 18th century gave this name to the native people of this region, and it is still used by some people even today. The Guatuso, however, prefer to call themselves Maleku or *Malécu maráma*, which means "our persons." So, the name Maleku is used instead of Guatuso. This chapter provides a description of the physical and cultural setting of the Maleku peoples (Figure 2.1).

2.1 Biophysical Environment

In this section is described the biophysical setting of the Maleku's habitat with emphasis on the ecological components of geology, soils, climate, hydrography, and different environments used by the Maleku.

2.1.1 Physiography

The Río Frío watershed can be divided in two large-scale geographic units according to its physiography: the northern river lowlands and the southern mountainous area. The northern lowlands consist of an extensive, undulating terrain with elevations ranging from 30 to 100 meters, covering 75 percent of the Río Frío's watershed (Figure 2.2). They are composed of recent Quaternary alluvial sediments eroded from the Guanacaste and Tilarán Cordilleras, and transported down slopes by rivers and streams. Several areas are virtually flat, interrupted only by topographic depressions that are permanently and seasonally flooded and filled with a variety of wetland ecosystems. Hydromorphic soils have developed from the accumulation of organic materials mixed with sand, mud, and clay in areas inundated year-round. Their poor drainage and presence of water make them difficult to farm.

The lower parts of the lowlands that are saturated for seven or eight months contain clay soils (gley), with high proportion of humus, but poorly drained. When water levels drop

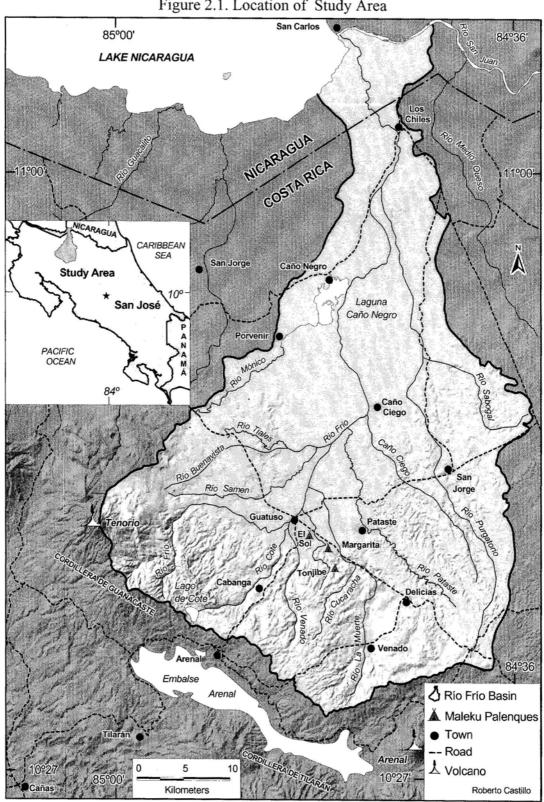
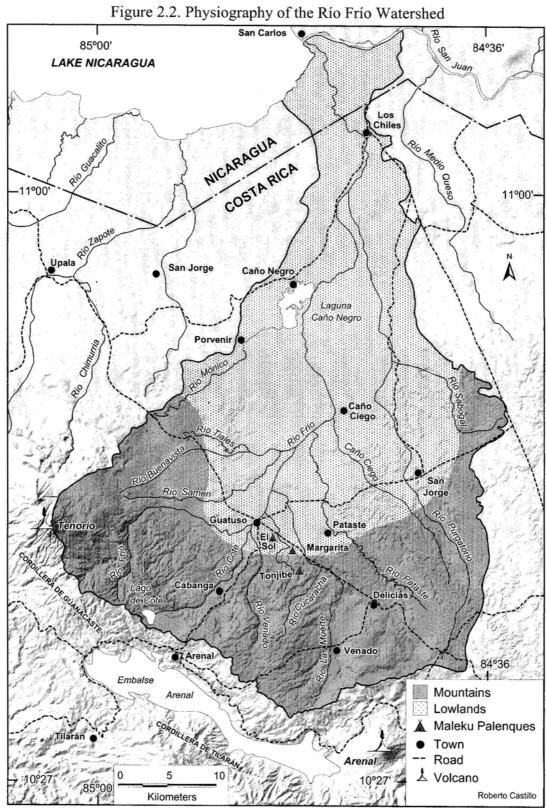


Figure 2.1. Location of Study Area



in February, March, and April, grassy, cyperaceous, and herbaceous vegetation covers these *bajos* (lowlands). The higher areas of these lowlands, which are only occasionally flooded contain alluvial soils with high content of organic matter, but poorly drained and highly acids, limiting their potential for cultivation.

The southern mountainous area corresponds to the Guanacaste and Tilarán Cordilleras, which rise from the adjacent alluvial lowlands to a maximum height of just over 1906 meters on the summit of the Tenorio Volcano. The surface geology is composed of Quaternary volcanic rocks covering a rugged topography of steep slopes ranging from 30 to 70 percent. In the Tenorio Volcano, over 1000 meters high, a lithosol soil recently developed from volcanic material is unsuitable for agriculture because of its lack of organic material and steep slopes. Down slope, volcanic materials have produced a fertile andosol soil, well drained, and with high content of organic material. However, steep slopes of 30 to 60 percent and high rainfall make them easily eroded.

Moving down slope and northward from the Guanacaste and Tilarán Cordilleras, located between 100 and 600 meters, the topography is dominated by hills, low ridges, and hillocks with some inclines of 15 to 30 percent. These landforms are made up of lavas, mudflows, and tobas accumulated by quaternary activity of the Tenorio Volcano. The Guanacaste Cordillera is bounded to the southeast by a small rift valley, in which lies Lake Arenal, once a smaller natural lake that has been dammed for electricity and irrigation purposes. This rift valley marks the beginning of the Tilarán Cordillera composed mainly of volcanic rocks such as basalts, lavas, and tobas of Miocene geologic age (Madrigal 1980; Malavassi and Madrigal 1970). From the volcanic materials have developed a reddish latosol soil characterized for having clay texture, slightly acid, well drained and with moderate content of organic matter (Pérez 1978). This soil is suitable for cultivation; however, it is highly susceptible to erosion on slopes over 30 percent because of the high precipitation.

2.1.2 Climate

The region has a tropical wet climate with annual average of precipitation and temperatures of 3,348 mm and 26°C respectively. The mean relative humidity is usually high varying from 85 to 92 percent throughout the year (Castillo 1992a:8; Castillo and Rodríguez 1993:2). However, rainfall amounts vary throughout the region and the year. There is a fairly uniform increase in annual average totals of precipitation from the northern lowlands to the southern mountainous areas. The rain increases from 2200 mm in Los Chiles; to roughly 3000 mm in Guatuso; to around 4000 mm in Lago de Cote; and to more than 5000 mm in Río Cote (Table 2.1 and Figure 2.3).

Meteorological Stations	Annual Average Precipitation (millimeters)	Altitude (meters)	Rain Records Available (years)
Los Chiles	2,210	45	9
San Jorge	2,810	55	16
Guatuso	2,986	50	23
Venado	3,471	252	12
Santa Lucía	3,780	300	13
Laguna Cote	3,947	670	29
Río Cote	5,010	695	24
Alto del Sahíno	5,079	825	9
Alto Banca Lucía	4,180	840	18

Table 2.1. Annual Average Rainfall Totals for Selected Sites, Río Frío Watershed

Source: ICE, 1995

The region presents two regimes of precipitation: a long rainy season and a very short dry season. The rainy season extends from May to February with two rainfall peaks in July and October, and a short dry spell lasting from mid-August to mid-September (Figure 2.4). Approximately 90 percent of the total annual rain falls between May and January, with July being the rainiest month of the year. There is no marked dry season along the northern slopes of the Guanacaste and Tilarán Cordilleras and the driest month of March still receives over 70 mm of rain. However, there is a short dry season in the lowlands extending from March to April. Rainfall reaches a minimum of 25.7 mm in April and 46.1 mm in March around the towns of Los Chiles and Guatuso respectively.

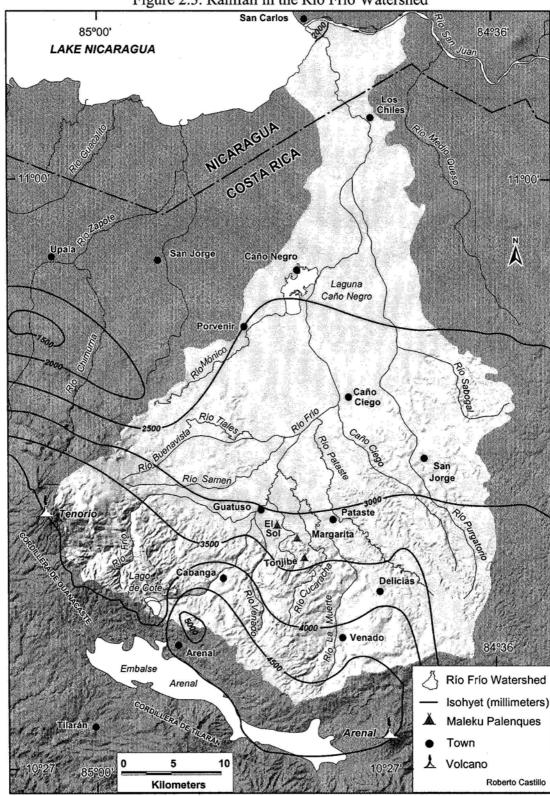
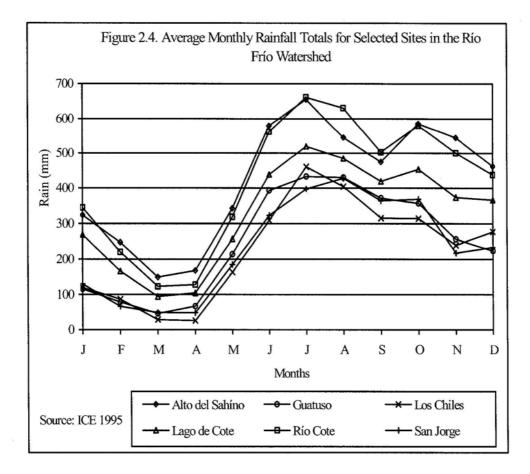


Figure 2.3. Rainfall in the Río Frío Watershed



Temperatures also vary with elevation. Annual mean temperature ranges from 26°C in Los Chiles and Guatuso, to 20°C in the high elevations of the Guanacaste and Tilarán Cordilleras. For the lowlands the maximum mean monthly temperatures occur in April with 32.5 °C and the minimum in February with 20°C. Differences between mean monthly temperatures are insignificant, 2 to 2.5°C, however between maximum and minimum monthly temperatures differences vary from 8.6 to 11.8°C.

Alternations between rainy and dry season play a significant role not only in the genesis and distribution of different ecosystems, but also in the programming and timing of subsistence activities. For the Maleku the months from February to April and August to September usually have been the most active in terms of fishing, hunting, gathering, harvesting, and preparing lands for agriculture. On the contrary, the rainiest months from May to July and from October to January have been usually devoted to planting and taking care of crops near their houses, and to make crafts, clothing, hammocks, and hunting tools.

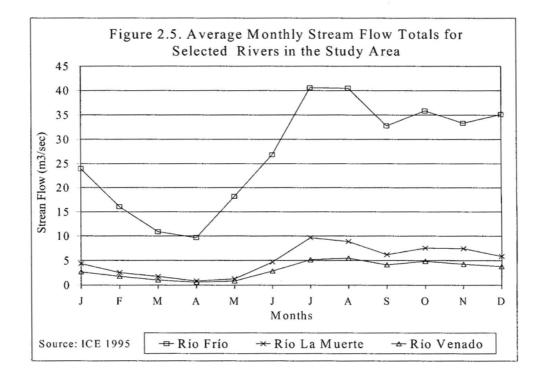
2.1.3 Hydrography

The Río Frío Basin, located in the northern part of Costa Rica, covers an area of 1554 square kilometers, and is drained by the Río Frío itself, which flows 90 km from its origin at the Tenorio Volcano in the Guanacaste Cordillera to its confluence with the Río San Juan. The Río Frío is an important tributary of the Río San Juan that is the largest watershed in Central America (Girot and Nietschmann 1992:52). It is also an international watershed since it flows through Nicaraguan territory on its last eight kilometers before emptying into Río San Juan. The name Río Frío was given probably by the Spanish explorers who visited the region in the 18th century to refer to its cold waters flowing from the Guanacaste Cordillera (Figure 2.1).

Throughout its length, several tributaries flowing from the Guanacaste and Tilarán Cordilleras feed the Río Frío, which include the Sabogal, Caño Ciego, Pataste, La Muerte, El Sol, Venado, Cote, Buenavista, Mónico and Samen. Relatively large boats carrying up to 25 passengers can ply the Río Frío from its confluence with the Río San Juan up to the town of San Rafael de Guatuso during the rainy season. For its tributaries navigation is limited to short stretches using small boats capable of carrying no more than 5 passengers.

Stream flow is permanent, year round. Annual average discharge of the Río Frío, measured at San Rafael, is 28.2 cubic meters per second. For other smaller tributaries such as Venado, La Muerte and Cote are 3.55, 6.12, and 2.16 cubic meters per second respectively (Figure 2.5). Stream flows are lowest between February and April and highest between May and January. The stream flow pattern coincides with the seasonal alternation of dry and rainy season that occurs in the region.

Two other important water bodies are the upland Lago de Cote (Cote Lagoon) and the lowland Caño Negro Lagoon. Cote Lagoon is a volcanic crater about one kilometer in diameter and 500 meters deep. Drained by the Río Cote, this lagoon has been an important fishing and recreating site. The Caño Negro Lagoon, located in the lower reaches of the Río Frío, is part of the Caño Negro Wildlife Refuge. The lagoon covers approximately 900 hectares during the rainy season when levels of the Frío and Mónico rivers are up and the entire area is flooded. As the river levels drop in February, March, and April, the lagoon fragments into several smaller, disconnected lagoons. Variations in lagoon's water levels produce alternate aquatic and terrestrial habitats, home to a great diversity of plants and animals, which have been essential in Maleku's subsistence.



2.1.4. Natural Environments

The Río Frío watershed presents a diverse mosaic of natural environments that can be grouped into six large-scale ecosystems representing a general collection of biological communities: (1) wetlands, (2) tropical moist forest, (3) premontane wet forest, (4) tropical wet forest, (5) premontane moist forest, and (6) lower montane moist forest.

2.1.4.1 The Wetlands

Some lower areas (topographic depressions) of the lowlands are seasonally flooded from May to January; others are occasionally flooded, while others remain permanently

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inundated all year-round. These particular hydrological conditions have originated multiple wetland ecosystems (Figure 2.6).

<u>Permanent and seasonal lagoons</u>. Extensive areas of the lowlands, particularly below 45 meters, are inundated between May and January when rivers swell above their banks and natural levees. High water floods spill onto extensive low-lying areas, rising water levels of existing lagoons such as Caño Negro and Playuelas, and creating seasonal lagoons. When the entire area is inundated, movement of fish and other wildlife occur. They provide habitats for amphibians such as frogs and toads, reptiles such as turtles, and caiman, and for foraging and nesting birds. The shallow waters are covered with vegetation such as lechuga de agua (*Pistia stratiotes*), helecho (*Salvinia sprucei*), dormilona (*Mimosa pudica*), tifa (*Typha sp*), and many other species.

When rainfall and river water flow decrease between February and April, the permanent lagoons shrink significantly and the seasonal lagoons drain themselves. Grasses, cyperaceous, and herbaceous vegetation colonize their recently silted bottoms forming a vegetative association locally known as *Los Llanos*. Terrestrial habitats replace aquatic ones causing mass mortality of aquatic plants and fish, which are stranded in evaporating pools. Many birds, herbivores, mammals, and predatory mammals migrate to the area to catch fish and turtles, to harvest turtles and caiman eggs, and to take advantage of the open dry land for grazing, which is also used by local people to pasture cattle (Castillo and March 1992:5; Solano 2002:68). *The Llanos* are located between the towns of San Rafael and Los Chiles along large stretches of the lower reaches of the Río Frío and some of its tributaries. The Maleku have heavily relied in this key habitat for hunting, fishing, and collecting activities.

Los Yolillales. They are permanent over-flooded low-lying depressions (swamps) dominated by the palm *Raphia taedigera*, locally known as yolillo. The Raphia palm is joined by smaller palms such as palma real (*Scheelea rostrata*), and corozo (*Corozo oleifera*), and abundant grazzy and herbaceous vegetation well adapted to permanent flooded conditions and saturated soils (Pérez and Chacón 1966:90). The *Yolillales* occupy extensive parts of the lowlands, especially in areas surrounding the Caño Negro lagoon and along both sides of the

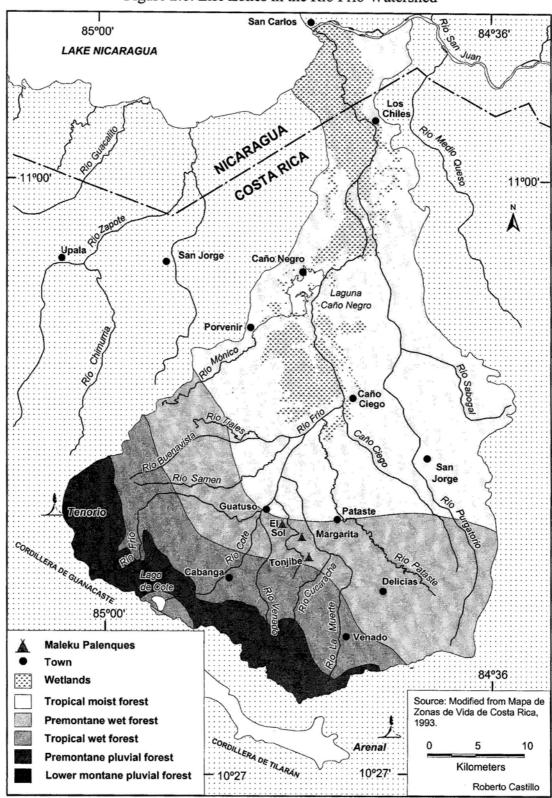


Figure 2.6. Life Zones in the Río Frío Watershed

Río Frío's lower course. Unfortunately, these swamp environments have been drained and reduced in the last decades to give way to citrus plantations and cattle ranching.

Lower forest. This type of forest, composed of trees no higher than 15 meters, is found in areas occasionally flooded between June and January. This hydrologic condition favors the development of medium-high tree associations dominated by a single species. Los Marillales is a vegetative community dominated by the santa maría (Calophyllum brasiliense), that may be mixed with palms, particularly Raphia palm. Important patches of Marillales are found to the south and northwest of Caño Negro. Another vegetative community is the locally known Los Nancitales, where the single tree species nance (Byrsonima crassifolia) dominates the landscape. Compared to the Marillales, the Nancitales occupy smaller areas with more acidic but better drained soils (Pérez and Chacón 1966:91).

On higher areas less subject to flooding and with better drainage conditions are found other important vegetative associations with one tree species dominant such as the camíbar (*Copaifera aromatica*); the tamarindo (*Dialium guianense*); the gavilán (*Pentaclethra macroloba*), and the guayabón (*Terminalia sp*) (Morillo 1992:5; Solano 2002:66).

A detailed inventory of the wetland's biodiversity has reported for the 10,000 hectare-protected Wildlife Refuge of Caño Negro 300 different species of trees and bushes grouped in 73 families, 78 species of mammals, 96 species of amphibians and reptiles, and 25 species of fish (Figure 12.4). This protected area also provides refuge to a great quantity of migratory and endemic birds, of which have been reported 275 different species (Morillo 1992:5; Zamora 1992:4).

Taking advantage of their high biological diversity and productivity, the Maleku have relied heavily on these sources of rivers and wetlands for their food supplies, material culture, and transportation. The rhythms of the rivers and wetlands have shaped their daily and yearly routines.

2.1.4.2 Tropical Moist Forest

This forest covers most of the alluvial lowlands of the Río Frío with annual precipitation ranging between 2200 and 2800 mm and mean temperature of about 26 °C (Bolaños and Watson 1993). Since the alluvial lowlands, particularly in the far northern lower reaches of the Río Frío, have nearly three dry months, some upper story trees, 30-40 meters high, are semi-deciduous. The under story is composed mainly of evergreen trees, shrubs, and a wide range of palm communities. Some common tree species of this forest are silk-cotton tree (*Ceiba pentandra*), fruta dorada (*Virola koschnii*), and laurel (*Cordia alliodora*).

Along the rivers, streams, creeks, and oxbow lakes that traverse the alluvial lowlands are found gallery or riverine forests. The tree-walled watercourses show only small differences from the tropical moist forest species. Usually there are more local dominants and a greater predominance of palms (Tosi 1971). Among the dominant tree species are the sotacaballo (*Algullobium iongifolium*), guaba (*Inga edulis*), poponjoche (*Pachira aquatica*), bala de cañón (*Couroupita nicaraguensis*), and zapote (Pouteria sapota). Small trees such as saragundí (*Cassia reticulata*), *Eugenia acapulcensis*, and *Palicourea crocea*, as well as some grasses such as *Paspalum repens* and *Hymenachne amplexicaulis* are common.

The Maleku have been generally confined to lowland riparian forest sites because of their suitable conditions for agriculture, settlement, transportation, and food-getting activities, particularly hunting and fishing. Many tropical forest mammals such as jaguar, ocelot, tapir, collared peccary, and birds have used gallery forests as natural corridors for possible dispersal routes. The relatively alluvial fertile soils along riverbank and natural levees have been long utilized for agriculture.

2.1.4.3 Premontane Wet Forest

This type of forest is found along the lower flanks of the Guanacaste and Tilaran Cordilleras, which ranges from 100 to 300 meters in elevation, and receives between 3000 and 3500 mm of rainfall annually (Tosi 1971). The premontane wet forest is similar to the tropical moist and wet forests, although the number and diversity of species is lower. It comprises an upper story of tall evergreens and under story containing a wide range of palms. Ferns, mosses, and epiphytes are common. The most common tree species are almendro (*Dipteryx panamensis*), corteza amarilla (*Tabebuia crysantha*), burío (*Heliocarpus sp*), vizcoyol (*Bactris sp*), and cascuá (*Cupania glabra*).

2.1.4.4 Tropical Wet Forest

Covering the middle slopes of the mountain ranges located between 300 and 600 meters is a tropical wet forest. This area receives between 3000 and 4000 mm of precipitation annually. The tropical wet forest is a highly diverse ecosystem, with a tremendous variety of plants. The tall broadleaf evergreen upper story trees, many over 50 meters high, have compact crowns and grow very close together. The dense under story includes high concentrations of palm communities and broad-leaved herbaceous plants (Allen 1956:53). The forest contains of useful palms and trees such as rubber (*Castilla elastica*), royal cedar (*Cedrela adorata*), cedro macho (*Carapa nicaraguensis*), mastate (*Brosimun utile*), balsa (*Ochroma lagopus*), hog plum (*Spondias lutea*), and ojoche (*Brosimun guianense*).

2.1.4.5 Premontane Moist Forest

The areas surrounding Tenorio Volcano, Cote Lagoon and the Río Frío headwaters located between 600 and 1500 meters in altitude is covered with the premontane moist forest. Total precipitation is over 4500 mm per year (Bolaños and Watson 1993). The upper story contains mainly evergreen trees 30-40 meters high, while the under story is composed of a wide range of shrubs, palms, ferns, mosses, and epiphytes. Some of the most common tree species of this forest are the chilamate (*Ficus crassifolia*), níspero (*Dipholes sp*), campana (*Guarea sp*), peine de mico (*Apeiba aspera*), molenillo (*Luehea candida*), and several comestible palms (*Iriartea gigantea, Socratea durissima, Ocotea palmacea*).

2.1.4.6 Lower Montane Moist Forest

This type of forest is limited to a small area on the summit of the Tenorio Volcano located above the 1500 meters. The area has an average annual temperature that ranges between 12 and 18°C and receives precipitation in excess of 4000 mm (Bolaños and Watson; Tosi 1971). Because of its altitude and high humidity this forest is frequently enveloped in drizzle, cloud, and fog. Species are mainly evergreens, including oak (*Quercus costarricensis*), and ira rosa (*Ocotea austinii*) that predominate in the upper story. The under story contains many bamboos, orchids, mosses, ferns, and lichens.

These forests and related wetland ecosystems found in the Río Frío watershed serve as habitats for a remarkable diversity of plants and animals. A preliminary inventory of plants and animals carried out by the Organization for Tropical Studies (OTS) in 1988 in different forest sites of the Río Frío and its western neighbor the Río Zapote watershed, clearly demonstrated the ecological importance of this region within the national context (OET 1988:15,115-116,140). According to this inventory, the region concentrates more than 5 percent of the total biodiversity of Costa Rica (Table 2.2). There were identified 1,016 plant species; 4,731 insect species; 49 amphibians, 60 reptiles, 106 mammals, and 412 different species of birds, of which 60 are aquatic-wetland related species. Summing up amphibians and reptiles, mammals, and birds species this small region, which represents only 6.6 percent of the country's territory, contains about 45.6 percent of all the species identified for Costa Rica.

During the last three decades, large areas of the Río Frío's forests and wetlands have been converted into pastures and agricultural plantations, as a result of the spontaneous migration of Costa Rican and Nicaraguan peasants and the planned colonies sponsored by the Costa Rican government. Rapid population growth has demanded more forest, land, fish, and game resources for domestic and commercial purposes. Concerned with the destruction of the diverse ecosystems the government of Costa Rica has established two protected areas in the region. The Tenorio National Park, located in the Guanacaste Cordillera, was established to protect the headwaters of the Río Frío and samples of the lower montane, premontane and tropical moist and wet forests, as well as wildlife associated with them. The Caño Negro National Wildlife Refuge located in the lowlands was sat up to preserve remnants of tropical moist forest, wetlands, and wildlife (See Figure 12.4 below).

Species	Costa Rica	Frío and Zapote Watersheds	Percent of the Country
Plants	11,000	1,016	9.23
Insects	100,000	4,371	4.37
Amphibians and Reptiles	362	109	30.11
Birds	810	412	50.86
Mammals	203	106	52.21
Total	112,375	6,014	5.33

 Table 2.2. Number of Plant and Animal Species Identified in Costa Rica and in the

 Frío and Zapote River Watersheds, 1988

Source: OET 1988

These protected areas have played an important role in protecting and preserving part of the region's rich biodiversity. However, with their establishment the Maleku indigenous peoples have lost access to essential gathering, fishing, and hunting grounds that once rightly belonged to them.

The utilization and exploitation of this heterogeneous mosaic of land and water ecosystems has been essential in fulfilling the material and biological needs of the Maleku indigenous people for centuries. Favorite game animals are found in lowland and upland forests. In addition, these forests have a great diversity of plants traditionally gathered by the Maleku for food, construction, clothing, medicine, and many other subsistence purposes. The wetland ecosystems provide essential habitats and shelter for a multitude of fish, reptiles, amphibians, mammals, birds, and smaller organisms that have been important in local subsistence. They also serve as the bases for economic activities such as tourism, research, transport, and grazing cattle. Moreover, wetlands provide significant environmental services such as flood control, sediment and pollution removal, and stabilization of climate.

2.2 The Cultural Setting

This section provides a description of the cultural setting of the Maleku indigenous peoples, by locating them within the context of other indigenous groups in Costa Rica, by describing their current geographic and social-cultural cultural conditions, and by providing a brief review of previous studies on the Maleku people.

2.2.1 Indigenous Peoples in Costa Rica

Despite suffering genocide, acculturation, and paternalism for centuries indigenous peoples have managed to survive in Costa Rica. Their population is estimated at about 63,876, making up 1.7 percent of the country's population (INEC 2002). This native population is divided in eight different indigenous groups: Cabécar, Bribri, Guaymí, Boruca, Térraba, Huetar, Chorotega, and Maleku. They live in 22 territories legally known as "Reservas Indígenas" (Indian Reserves), covering an area of 324,821 hectares, which represents 6.4 percent of Costa Rica's territory (Figure 2.7).

Around 42 percent of the indigenous population live in these 22 Indian Reserves. The remainder population is found in the lands adjacent to these reserves (18%) or elsewhere throughout the country (40%). Unfortunately, for those people living outside the reserves, it is unknown the specific indigenous groups to which they belong. The census's questionnaire did not include questions about groups' membership or ability to speak a native language. Consequently, it is ignored the actual number of people that comprise each individual indigenous group in Costa Rica. In addition, 18 percent of the estimated indigenous population came from other countries, mainly Miskito and Guaymí from Nicaragua and Panama respectively (INEC 2002). So, the truly Costa Rican indigenous population comprises only 1.3 percent of the country's population.

Eight indigenous groups remain in the country, varying in size, culture, and socialeconomic conditions. The Cabécar is the largest indigenous group in Costa Rica with 9,861 people (Table 2.3). They live in Chirripó Arriba, Chirripó Abajo, Nairí-Awari, Talamanca-Cabécar, Telire, and Tayní territories located in the Caribbean side. On the Pacific slope, the

Lake Nicaragua 83° 86° NICARAGUA 11° 119 Caribbean Bagaces . Sea Volcán de los Votos (Poás) Y Groups Indian Reserves Sarchí . Nicoya Tacares • Or 2 Chomes Barva • Ista MALEKUS 1- GUATUSO Chin Patarrá Aquiares Orotina Curridabat Nosara Cot CHOROTEGAS 2- MATAMBU Sámara 0 3- QUITIRRISI Tabarcia Aserri HUETARES 4- ZAPATON N B 5- NAIRI-AWARI 6- CHIRRIPO Parrita 7- ALTO CHIRRIPO Quenos CABECARES 8- TAYNI 9- TELIRE 10- TALAMANCA CABECAR Pacific Ocean P 11-UJARRAS Α 12- COCLES 9° N 9º 13- TALAMANCA BRIBRI А BRIBRIS 14- SALITRE М 15- CABAGRA Á TERIBES 16- TERRABA 21 17-BORUCA nsula de Osa BORUCAS 18-CURRE 19- COTO BRUS 20- ABROJO MONTEZUMA **GUAYMIES** 30 60 21- OSA Punta Burica Source: Guevara and Chacón 1992 22- CONTE BURICA kilometers 86° 83

Figure 2.7. Indian Reserves in Costa Rica

29

Cabécar are found in the Ujarrás Indian Reserve. The Bribri are the second largest group in Costa Rica with about 9,645 people living in the Talamanca-Bribri and Kéköldi Reserves in the Caribbean slope, and the Salitre and Cabagra Reserves in the southern Pacific slope. Both Cabécar and Bribri have closely related languages, and similar religion beliefs, social organization, and material cultural traits. They retain customs such as chichada, Sorbón, and Muakuke dances, natural medicine, and still 86 percent of the Cabécar and 55 percent of the Bribri speak their language (INEC 2002). However, those living in the Pacific reserves have lost much of their lands to peasant farmers, cattle ranchers, and large international agricultural export companies.

Indigenous Groups	Indigenous	Area (ha)	Population
U	Reserves		
	Alto Chirripó	74,677	4,619
	Bajo Chirripó	19,710	363
	Tayní	16,216	1,807
Cabécar	Talamanca	22,729	1,335
	Cabécar		
	Telire	16,260	536
	Nairí-Awari	5,038	346
	Ujarrás	19,040	855
	Talamanca Bribri	43,690	6,467
Bribri	Kéköldi-Cocles	3,538	210
	Salitre	11,700	1,285
	Cabagra	27,860	1,683
Boruca	Boruca	12,470	1,386
	Rey Curré	10,620	631
Térraba	Térraba	9,355	621
	Abrojo-	1,480	387
Guaymí	Montezuma		
	Osa	2,757	114
	Conte Burica	11,910	971
	Coto Brus	7,500	1,091
Chorotega	Matambú	1,710	868
Huetar	Zapatón	2,855	54
	Quitirrisí	963	952
Maleku	Guatuso	2,743	460
	22	324, 821	27,041

Table 2.3. Indigenous Groups and Reserves in Costa Rica

Sources: FUNDCOOPA-IETSAY 1997:15; Guevara and Chacón 1992:62-131; INEC 002; Tenorio 1988: 55-65.

In the southern Pacific region live 2,017 Boruca or Brunka, and 621 Térraba or Teribe indigenous peoples. Only 76 people speak the Boruca language, and most of them are elders, while the Térraba language is extinct. Thus, Spanish is used as their principal language. Nevertheless, they consider themselves Indians and preserve some traditions such as handicrafts, vernacular houses, and drinking chicha. The Boruca are well known for making fine wood masks and dye textiles. They also celebrate a cultural tradition every year of the "Fiesta de los Diablitos" (Little Devils' Party), which is a remembrance of the war and struggle against the Spaniards during the colonial period (Salazar 1980:3-5; Tenorio 1988:30).

The Guaymí or Ngöbe comprise some 2,563 persons and live at the southern Pacific region in four different territories: Coto Brus, Abrojo-Montezuma, Conte Burica, and Osa. They speak Spanish but about 84 percent of them still communicate in their own language, and have retained their customs and traditions (INEC 2002; Rojas 1984:44). The Guaymí is one of the indigenous groups in Costa Rica that have maintained more of their customs and traditions. Ngöbe women are the only indigenous group who still wears their typical dresses (FUNDCOOPA-IETSAY 1997:35).

The last redoubt of the Chorotega people are found in the Matambú indigenous territory, the town of Guatil, and other small towns located in the center of the Guanacaste Peninsula. These Chorotega descendants who number about 995 have lost their language and most of their customs and material culture. However, their indigenous inheritance is shown in the elaboration of pottery vessels, construction of houses, and preparation of food and recipes (Tenorio 1988:44-45).

Another indigenous group, descendants of the Huetar Indians, lives in the Quitirrisí and Zapatón Indian Reserves. There are about 1700 of these Huetar descendants, but they no longer speak their language. Living similar to *campesino* farmers of the Central Valley, they continue many ancestral traditions such as the use of natural fibers, vines, palms and dyes to make baskets, mats, and hats. These handicrafts, as well as traditional medicinal plants are sold in the surrounding communities, streets, or in souvenir shops in the capital city (Quesada 1996:210-247).

Living in the Guatuso Indian Reserve, northern part of Costa Rica are the Maleku, the focus of this study, and the topic of the next section. There are also some Miskito Indians, recent immigrants from Nicaragua, who live in Costa Rica. They are not concentrated in specific indigenous territories or communities, although it is more common to find them around Tortuguero, Barra del Colorado, and Parismina coastal communities located along the northern Costa Rican Caribbean coast (Bozzoli and Guevara 2002:2-3).

The Costa Rican Indigenous Law of 1977 legally recognizes Indian Reserves established in the last 45 years. According to this law the indigenous land is "nonseizable," "imprescriptibly," and "inalienable," and the Indian communities have the sole right to its forest and mineral resources. However, violation and lack of enforcement of indigenous legislation have allowed outsiders to take over territories and resources, and destroyed indigenous way of life.

The unique life of indigenous population of Costa Rica is being seriously threatened by constant and arbitrary plundering of their lands. Only 60 percent of reserve lands remain under indigenous control, which represents 3.8 percent of the country's territory. However, most of this land is covered by forest or is located on steep slopes, with only 10 percent being suitable for cultivation. The remaining 40 percent of reserve lands are under nonindigenous control, which has been deforested for cattle grazing (Barrantes 1991:221; Guevara and Chacón 1992:12).

Practically all the Indian Reserves have suffered significant territorial reductions since their establishment (Table 2.4). Non-Indians have bought land from indigenous peoples, paying them low prices, with horses, liquor, or through cheating them. In other cases, they simply have used intimidation tactics, or land invasions to take the land away from the Indians (Bozzoli 1975:23). For example, China Kichá, a reserve established in 1956 was invaded by land squatters, causing its derogation in 1982, and forcing Bribri and Cabécar people to migrate to the Caribbean Talamanca slopes (Guevara and Chacón 1992:53; Ornes 1980:79; Tenorio 1988:17). Related to the problem of land usurpation and encroachment, there is also a significant amount of non-Indians living in the reserves, averaging around 18 percent. This percentage, however, varies from one reserve to another.

Indigenous populations are certainly dominant in the Cabécar, Bribri, and Ngöbe reserves, while they are outnumbered in the Zapatón, Guatuso, Térraba, and Boruca reserves.

Indian Reserves	% Land Under Indigenous	% Indigenous	
- Marina A	Control	Population	
Alto Chirripó	60	98.3	
Bajo Chirripó	75	97.6	
Tayní	97	99.4	
Talamanca Cabécar	85	97.5	
Telire	99	100	
Nairí-Awari	-	98.9	
Ujarrás	37.3	83	
Talamanca Bribri	65	94.2	
Kekoldi-Cocles	38	47.7	
Salitre	60.2	91.6	
Cabagra	37.4	71.5	
Boruca	43.9	46.9	
Rey Curré	23.3	64.3	
Térraba	26.3	43.6	
Abrojo-Montezuma	50	95.3	
Osa	55	96.6	
Conte Burica	58	87.4	
Coto Brus	59	99.7	
Matambú	58	87.2	
Zapatón	25	11.6	
Quitirrisí	20	77.7	
Guatuso	15	41.3	

Table 2.4. Land and Population Distribution in Indian Reserves of Costa Rica

Sources: FUNDCOOPA-IETSAY 1997:15; Guevara and Romagosa 1988:22; INEC 2002; Palmer, Sánchez, and Mayorga 1991:65; Tenorio 1988:65.

In addition, to losing lands to peasant farmers and cattle ranchers, the indigenous peoples confront new dangerous threats. National and international companies and the Costa Rican State itself are interested in developing oil perforations, mining exploitation, and hydroelectric projects on indigenous lands. Oil perforations in the Talamanca Reserves in the 1980s brought disaster to Bribri and Cabécar indigenous peoples: loss of lands, land use changes, pollution, increases of drug abuse, alcoholism, and prostitution (Borge and Villalobos 1994:53-80). Different companies, mainly from the United States have applied for mining permissions to the Ministry of the Environment in order to exploit copper,

bauxite, gold, and zinc in indigenous reserves since 1991, covering areas that range from 246 to 1157 square kilometers (Guevara 1993; IWGIA 1994:49).

The Costa Rican Electric Institute (ICE) is planning to build two hydroelectric power plants that will displace 20 Boruca and Térraba communities in the southern Pacific region, and 80 percent of the Bribri population on the Talamanca Reserve (Borge and Castillo 1997:209). Other threats to the indigenous communities include the construction of an oil pipeline and a trans-Talamanca highway, illegal logging, and encroachment on indigenous lands due to the expansion of banana and pineapple plantations.

In terms of levels of social development, most of the indigenous peoples live under very poor conditions. They rank among the poorest in contemporary Costa Rica (Table 2.5). The illiteracy rate is around 4.5 percent for the country as a whole, while for indigenous peoples it is about 30 percent (but in some communities can reach up to 95 percent). Only 56 percent of the indigenous population under age 15 attend primary schools and roughly 9 percent have high school education or more. They are way below the national average of 85 percent and 46 percent respectively.

Approximately 35 percent of the indigenous population are not covered by social health programs. They suffer from malaria, tuberculosis, measles, diarrhea, parasites, and other diseases without receiving appropriate medical attention, particularly the more isolated Bribri and Cabécar communities of Talamanca. The poor health conditions and lack of assistance are reflected in their higher infant mortality rate of 28 (out of 1000), compared to 16 in the rest of the country. In respect to housing conditions and basic services (such as electricity, aqueduct water, running water, build-in toilets and showers), the indigenous peoples experience worse living conditions than the rest of the country.

In order to overcome socioeconomic problems and daily threats to their territories and cultures, the indigenous peoples are working together to reform the Indigenous Law of 1977, and have presented a new indigenous bill of law entitled "The Law of Autonomous Development of Indigenous Peoples." This new law project aims to change the Indian Reserves category to autonomous territories, to demarcate them, to provide for selfgovernment and self-determination, to implement bilingual education programs, to envisage co-management of protected areas, and to regain control of reserve lands illegally appropriated by non-Indians.

Socioeconomic Indicators	National	Indigenous	Maleku
Illiteracy rate	4.5	30.2	10.8
Average years of formal education	7.6	3.4	4.8
% Attendance to basic education	85	56.4	76.6
% Population with high school education or more	46.4	9.1	12.5
% Population without health insurance coverage	18	35	13
Infant mortality rate (1000)	16	28	20
General fecundity	2.0	3.3	2.6
Average children per woman	2.7	4.1	3.6
% Houses with electricity	97.5	38.3	91.4
% Houses with aqueduct water	91	29.1	89.8
% Houses with build-in toilets, septic tank	90.7	21.2	66.5
% Houses in good condition	64.9	26.5	39.6
% Population employed in the primary sector	18.9	88.2	80.3
% Population employed in the service sector	57.9	9	17.3
Open unemployment rate	4.6	2	10.4
% Families owing land	-	80	61.2

Table 2.5. Socio-demographic and Education Indicators for National, Indigenous, and Maleku Populations, 2002

Source: INEC 2002

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Unfortunately, this law project faces strong opposition. Some people argue that the indigenous population in Costa Rica is too small to subsist as distinctive cultural groups, and for this reason sooner or later they will be totally assimilated (Hall 1985:46). In

addition, the Constitution does not recognize a multi-linguistic culture, while some sectors of the Costa Rican society continue to label special regulations and indigenous legislation, including Convention ILO 169, as unconstitutional (Chacón 1998:1-2). The indigenous peoples must administer their reserves as part of an autonomous project in order to retain their territories and cultural identity.

2.2.2 The Maleku

The Maleku (or Maléku maráma, "our persons," as they call themselves) is the smallest and only remaining indigenous group in northern Costa Rica. They live in the 2994-hectare Guatuso Indian Reserve established in 1976. This indigenous reserve falls under the political administration of the Guatuso Canton, and lies within the Río Frío watershed, ranging from the foothills and lower ridges of the Tilarán Cordillera to the alluvial lowlands (Figure 2.8).

The population estimates of the Maleku vary significantly from one source to another. According to the official Costa Rican national census of 2000, there are 460 indigenous peoples living in the Guatuso territory, of which 425 are Maleku. The remainder indigenous population consists of members from the Bribri, Cabécar, Chorotega, and Huetar groups. Another population census undertaken in the Guatuso Reserve by the Iriria-Tsotchök Foundation in 1996 estimated the Maleku population at about 349 people (Morales 1996). This figure is similar to the 380 people obtained during this dissertation field research in the year 2000 (Field census 2000). The researcher combined ancestry, language, and self-identification to identify the Maleku population, while the 2000population census used only the criterion of self-identification. Several non-Indian persons living in the reserve identified themselves as Indians probably because of long standing friendship, empathy, and some knowledge of the language and culture, and intermarriage links.

There about 380 Maleku people living in three neighboring "palenques" or communities along the banks of the Río El Sol: Tonjibe, Margarita, and El Sol (Figure 2.8). Palenque is a Spanish word meaning palisade or stockade of wood, and the historical

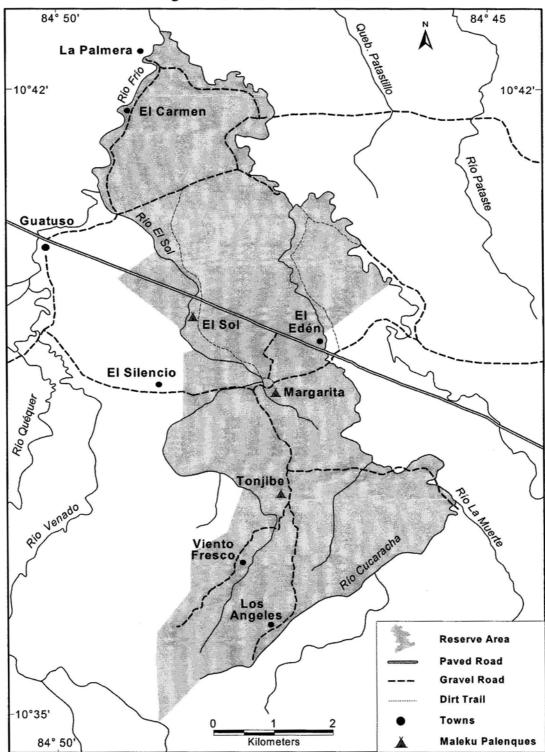


Figure 2.8. Guatuso Indian Reserve

evidence points to Bishop Bernardo Thiel as the first one to use this name to refer to the Maleku communities in 1882. El Sol is the smallest palenque with 45 people, followed by Margarita with 157, and Tonjibe with 178 inhabitants. These communities, following a government housing project, consist of groups of houses clustered together, and separated by only a few meters, emulating modern residential patterns. Houses are made of cement block walls, or half cement and half wood, metal roofs, and concrete floors. They measure only 80-90 square meters with five small rooms, and are usually inhabited by nuclear families. The communities of Tonjibe and Margarita have primary schools, basic health facilities, soccer fields, small retail stores, and chapels of different church denominations.

These three communities are easy accessible by paved and unpaved roads. A major interregional paved road running east to west practically cut the Guatuso Reserve in two halves. The community of El Sol is located next to this major road, while Margarita and Tonjibe are reachable by an unpaved road, which is in fairly good condition all year round. The Maleku's communities are located within walking distances of Guatuso, the most important population center of the region. It concentrates local and government institutions, health and education facilities, businesses, and supermarkets commonly used by the Maleku people.

Although the Maleku present poorer living conditions compared to the country's population as a whole, their situation with respect to the other indigenous groups in Costa Rica is relatively much better. In terms of socio-demographic indicators such as infant mortality, health coverage, levels of education, as well as house's conditions, built-in toilets, and access to basic services such as electricity, aqueduct and running water, and public transportation, the Maleku rank the best among the indigenous groups of Costa Rica (Table 2.5).

However, in other important aspects the Maleku show unfavorable living conditions compared to the other indigenous groups. They have the highest percentages of landless families and unemployment rates, control the lowest amount of reserve's lands, and are outnumbered by non-indigenous peoples living in the Guatuso Reserve. As a result 40 percent of the families do not have access to land. The Maleku control only 20 percent of the 2994-hectare reserve's lands while the remainder is controlled by people outside the indigenous group.

The Maleku show the highest unemployment rate (10%) among the indigenous groups. They have depended traditionally on primary activities such as agriculture, fishing, hunting, and gathering forestry products. For this reason, reduction in their territories and resources due to land usurpation and deforestation are serious threats to their survival, forcing them to change and adapt to new livelihood strategies.

Most landowners farm their own small parcels of land and sell small surplus of maize, beans, cacao, and peach palm. However, earnings from these agricultural activities are insufficient to make a living, driving many of them to work for low-wages on farms belonging to their non-Indian neighbors. In addition, the Guatuso region where the reserve lies is a cattle-raising country, an activity that demands little labor. A few people engage in the service sector as maids, store clerks, and first aid-station attendants, while a few are professionals working as primary school teachers. More recently, people are making and selling crafts to the tourists, but the profits are very low. The lack of land and job opportunities in the reserve and surrounding region has pushed several Maleku to leave their communities. By the year 2000, there were about 30 people living and working in different parts of the country, mainly as maids, and construction and agriculture workers.

The Maleku are a minority in their own territory. According to the 2000-population census there were 1115 people living in the Guatuso Indian Reserve, of which 38 percent were classified as indigenous peoples. The non-indigenous population concentrates mainly in the small towns of Los Angeles, Viento Fresco, El Edén, and El Carmen. However, there are about 29 non-Indian members living among the Maleku's communities for intermarriage reasons and illegal presence (land squatters).

Miscegenation is becoming increasingly popular among the Maleku indigenous peoples. About 27 nuclear families are the product of the mixture of Maleku and non-Indian unions or marriages, which have produced 55 *mestizo* children. In addition, members of other indigenous groups such as the Bribri, Cabécar, and Huetar are found in the reserve

forming six mixed families, and producing 12 indigenous children (Field census 2000). Some Maleku see their intermarriage with other indigenous peoples as an excellent alternative to maintain their culture.

The Maleku language (Malécu Lhaíca, "the speech of our persons") is a member of the Chibchan family, which flourished in pre-Columbian times in the areas now designated as Colombia, Ecuador, Panamá, Costa Rica, and Nicaragua. The researcher estimates that no more than 60 percent of the Maleku population still speaks the native language. Offspring of Maleku males and non-Maleku females are not learning the language and Spanish is used instead. The opposite occurs with children of Maleku women, who have been traditionally the instructors of the language. As an alternative to maintain the language, since the 1996 children in the primary schools of the reserve are receiving Maleku classes taught by native speaking teachers. The program is sponsor by the Ministry of Education through its Office of Indigenous Education.

There are other important cultural elements that distinguish the Maleku from their non-native neighbors. They make crafts such as arrows and bows, drums, decorated gourds, and wood masks. They practice the custom of burying the dead inside their houses, and many adults still acknowledge their traditional religion. People over the age of forty retain an oral tradition that reveals practically no traces of Western cultural influence.

The Maleku are a very vulnerable indigenous culture, affected by its easy access by road, its proximity to non-Indian population centers, the presence and dominance of non-Indians in their own territory, the strong processes of miscegenation and acculturation, and its small population size. The reduction and destruction of their territories and natural resources have prompted the Maleku to abandon traditional livelihood activities and related customs and traditions, which are seriously threatening their future cultural survival.

2.2.3 Previous Research on the Maleku

The Maleku is probably the least known and studied indigenous group in Costa Rica. Studies on this indigenous group are scarce and focused on some very specific topics.

The bulk of the studies deal mainly with the socio-linguistics and descriptive linguistics of the Maleku language. Among the socio-linguistic studies stand out those undertaken by Betancourt and Constenla (1981), and Constenla (1982, 1988), which identify the language as an integral and active part of the Maleku community, and their daily communication.

By the end of the 19th century and beginning of the 20th century, several scholars such as Gabb (1883), Thiel (1883) and Lehmann (1920) collected extensive lists of Maleku vocabulary. Most of this vocabulary, however, has semantic and transcription mistakes. More recent descriptive linguistic studies include those by Porras (1959), Constenla (1975), Alvarez (1979), Smith (1979), and Sánchez (1984). These studies explore and explain everything related with the phonological system of the Maleku language.

Other areas within the descriptive linguistics have also received attention such as the studies of morpho-syntactic by Constenla (1982, 1986); the studies of morpho-phonology by Constenla (1990); and lexicography and poetry by Constenla (1992, 1993), and Castro, Blanco, and Constenla (1993). Finally, there is a research on ethno semantics and biotaxonomy, which describes the ethno-ornithology Maleku (Pizarro 1998).

There are a few ecclesiastical colonial reports, which describe the expeditions that took place between 1750 and 1783 to search for the Maleku first, and then, to conquer them by De Paula Soto (1976a, 1976b), by García Peláez (1852), and by De la Fuente (1938), which vaguely describe Maleku's physical appearance, settlement locations, and attitude toward outsiders.

Ethnographic descriptions of late 19th century Maleku's way of life are included in Bishop Thiel's missionary accounts (1927; 1896a; 1896b), complemented by other eyewitness reports by León Fernández (1882), José Daniel Carmona (1897), José María Figueroa (1873-1883), Carl Sapper (1899; 1942), O.J. Parker (1877), and Thomas Belt (1911). These historical sources provide good observations about burial customs, subsistence activities, settlement distributions, house types, and other material and nonmaterial cultural traits. They also provide insights into the rubber collector actions against the native population and the changes brought by the Catholic missionaries. Marc Edelman (1998), using Thiel's reports as the main source, provides the only modern academic contribution to understand the historical relationships among rubber, slavery, nationalism, and the destruction of the Maleku indigenous peoples.

Although many foreign travelers did not actually see the Maleku or visit their homelands during the nineteenth century, they compiled and included in their writings stories of people who had ventured into Maleku territory, including rubber tappers and soldiers from Nicaragua and Costa Rica. Interesting historical information about the Maleku are found in the writings of George Squier (1852, 1856), Thomas Francis Meagher (1970), Julius Froebel (1978, 1993), Bedford Pim (1863), Alexander Von Frantzius (1895), Frederick Boyle (1868), William Gabb (1883), Carl Bovallius (1977, 1993), John Bransford (1882), and Daniel Cleveland (1868).

During the first half of the twentieth century the Maleku remained relatively isolated and forgotten in the Río Frío region. This situation is reflected in the absence of historical sources and studies concerning them in this period. The only primary source is the missionary expedition made by the Bishop of Alajuela, Antonio Monestel, to the Maleku communities in 1923, whose accounts were compiled and published as a book in the same year (Céspedes 1923). This publication provides a fairly good description of the demographic, socioeconomic and cultural conditions of the Maleku. It also makes references to some of the problems encountered by the Maleku as a result of the Nicaraguan settlement expansion into their territory, a colonization process that began in the 1900s.

The most important sources of information for the 1950s and 1960s are a fieldworkbased research thesis in linguistics by Alvaro Porras (1959), fieldwork trips made by several anthropologists, including María Eugenia Bozzoli in 1967 (reports published in 1972), and an article by Reinaldo Ballestero (1952), the first primary school teacher to live among the Maleku. These particular fieldwork-based research and personal experiences portray the living conditions of the Maleku indigenous peoples for the specific years of 1951, 1958 and 1967. There are very few academic contributions to the understanding of Maleku life over the last three decades. A short article by Alfredo and Fernando González (1988) describes the 1964 and 1978 government housing projects when the new single-family houses made of metal roofs and wood floors and walls replaced the traditional large open thatched multifamiliar units, causing new health and social problems. In another study Jorge Acevedo (1986) describes the music, dances, songs, and instruments still used by the Maleku in some of their celebrations. Marcos Guevara and Rubén Chacón in their book (1992) about the indigenous territories in Costa Rica include a section on the Maleku, with particular emphasis on present territorial and political issues.

Other important academic studies include an article by Maria E. Bozzoli (1982) comparing the kinship systems of the Maleku and the Bribri of Talamanca; a book by the native Maleku Eustaquio Castro and Antonio Blanco with linguist Adolfo Constenla (1993) that is an oral narrative of the different aspects of Maleku religion. Finally, there is a compilation of several Maleku oral stories published by the Instituto de Estudios de las Tradiciones Sagradas de Abia Yala (IETSAY 2000).

Most scholarly research on the Maleku has been limited to the study of specific cultural complexes such as language, religion, kinship system, traditional houses, music and dances, crafts, compilation of oral stories, as well as the discussion of present territorial and political status of the Guatuso Indian Reserve. Although missionary, travel, and fieldwork accounts provide good ethnographic observations on the Maleku's way of life, there are restricted to specific past moments. This study in historical-cultural geography is an attempt to understand the culture history of the Maleku peoples, by reconstructing their 1) past lands, 2) population, 3) settlements, and 4) subsistence activities, and documenting how these key four aspects have changed over the last 130 years.

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3. The Cultural-Historical Approach in Geography

This dissertation research is a cultural-historical geography of the Maleku peoples following the Sauerian cultural-historical approach. This dissertation is part of a tradition among geographers interested in studying past and present geographical and cultural patterns and environmental relations of specific ethnic groups, as in this case, an indigenous group.

This chapter describes the cultural-historical approach and reviews past research on indigenous peoples of Central America. Firstly, the main directions proposed by Carl Sauer to develop his conception of cultural geography are outlined. Secondly, the main themes or topics that characterize the discipline of cultural geography are categorized, acknowledging that in the last three decades these themes have expanded to include new perspectives in geography. Finally, the geographic research on indigenous peoples of Central America, with emphasis on research methods used to reconstruct past and present conditions, and to document changes on geographic and cultural patterns over time are scrutinized.

3.1 The Sauerian or Berkeley School of Geography

In the 1920s Carl Sauer (1889-1975) founded what has become known as the Sauerian or Berkeley School of Cultural Geography, and it is this approach that is central to the 20th century evolution of cultural geography. His approach to the study of cultural geography was strongly influenced by 19th century European scholars such as August Meitzen (1822-1910), Eduard Hahn (1856-1928), Otto Schlüter (1872-1952), Alfred Hettner (1859-1941), and Siegfried Passarge (1866-1958) Alexander von Humboldt (1769-1859), Carl Ritter (1779-1859), Friedrich Ratzel (1844-1904), Paul Vidal de la Blache (1845-1918), and North American geographer George Perkins Marsh (1801-1882) (West 1990). Sauer's intellectual debt to these scholars was immense, but it was his prodigious talent for synthesis that opened new successful perspectives in cultural geography in the United States after the 1930s (Gade 2002:5; Kenzer 1987:57; Mikesell 1978:2; Speth 1987:22).

Carl Sauer followed some directions, which were later enriched by many of his students of the Berkeley School of Geography, to develop his conception of cultural geography and its emphasis on time and looking at the past to understand the present. Several methodological distinctions characterize this Sauerian Berkeley tradition in North America geography.

Firstly, the specific unit of study is the cultural landscape that is defined as the occupational inscriptions of human cultures on the lands they have occupied, the human's record upon the landscape, or the man-made constructions (Sauer 1956a:289). The natural landscapes are modified by humans to create cultural landscapes. This process was described by Carl Sauer as "culture is the agent, the natural area is the medium, and the cultural landscape is the result" (Sauer 1925b:342). Thus, cultural geography is concerned not only with delimiting cultural groups and describing the landscapes they have created, but also examining the transformation of these cultural landscapes through time, with emphasis upon the human culture as the dynamic creative factor in this process of change (Grossman 1977:129; Parsons 1976:87). Although culture is the shaping force, the physical landscape is also of fundamental importance for it supplies the materials out of which the cultural landscape is formed (Sauer 1925a:24). In this sense, cultural geographers downplay both environmental and cultural determinism by favoring holistic and ecological approaches that stress the inter-relationships between humans and nature.

Secondly, cultural geography adopted the historical method of explanation for understanding the transformation of the cultural landscape through time. Cultural landscapes change through time, as indeed do cultures occupying the landscape; hence there is an evolutionary component to cultural geography. With this basic thought in mind, cultural geography aims to understand contemporary landscapes as they are the outcomes of long term process relating to the changing relations between humans and land. The culturalhistorical geographer cannot study houses and towns, fields and factories, and ask about their where and why without questioning their origins and without delving into the past to explain elements in the contemporary landscape (Sauer 1927:186-187; 1941:8-9). The geographer looks into the past to discover the origins of cultural features, the distribution of former culture regions, and the character of past cultural landscapes in order to explain present cultural-geographic conditions (Wagner and Mikesell 1962:15). The use of the past to explain the present and to project the future is the reason why some cultural geographers call their field cultural-historical geography (Jordan and Rowntree 1976:35).

Within their historical method, cultural geographers have identified and employed a number of approaches to study change through time. One has been to select particular periods in time (sequence of cross-sections), describe the geography of that time, and then include a connecting narrative to another period in time. The object is to pause at certain stepping stones in the stream and to look at the surrounding stones. There will be scenes of the same place, but they will present geographic patterns and distributions particular to different times. The changes between the scenes or cross-sections are explained by the processes (physical and human) that have characterized the intervening years' (Mead 1981:1). The other approach is sequent occupance, which recognizes a series of stages during which the cultural landscape is essentially unchanging, with periods of rapid and profound change occurring between stages. There is a succession of cultures and a related succession of cultural landscapes. Each period or stage of stability reflects a particular cultural occupance, but is transformed into a subsequent period by independent invention or diffusion processes such as in-movement of a different cultural group or because a substantial change in technology or economic system (Norton 2000:94).

Thirdly, there is an emphasis in the study of the visible, concrete elements of cultural landscapes that give character to an area (Sauer 1962:30). Material culture is defined as those visible physical objects that are made by or used by humans, and that can be seen, named, organized, and touched. The origins, diffusion, and distribution of house and fence types, covered bridges, cemeteries, settlement patterns, field and agricultural systems, and domesticated plants and animals, have been a fundamental part of cultural-historical geography (Grossman 1977:129; Mikesell 1977:460; Parsons 1987:161; Sauer 1941:7; Smith and Foote 1994:28). Some of these cultural complexes have been studied individually over time to construct a story of landscape change (Coones 1992:215). A classic concern of cultural geography is to investigate the distinctive material landscapes that different cultural groups have created from the physical environment, and that permit the delimitation of culture regions. The emphasis on material and visible landscapes did not

imply an exclusion of cultural identity, and cultural geographers frequently identified groups according to their language, religion, and ethnic identity. Thus, culture is also viewed as a system of shared values and beliefs (Norton 2000:13).

Fourthly, cultural-historical geography combines direct fieldwork observation and the use of documentary records to reconstruct past stages of cultural landscapes and regions, and document their spatial changes through time (Sauer 1956a:295-296). The archival work involves the mastery of written documents and contemporaneous maps, and fieldwork includes the ability to read the old documents in the field and the location of the cultural relics and fossils (Sauer 1941:13-16). From this preference for fieldwork or "dirty boots" rather than "armchair geography," emerged the notion in cultural geography that trained field workers, sensitive to both culture and environment and willing to get their boots muddy, saw more of what was really happening to our globe than did the armchair theoreticians (Mikesell 1977:461; Parsons 1977; Speth 1981:232; 1987:11,22). A reconstruction of past landscapes and regional interactions based on archival and intensive fieldwork research is the goal of cultural geography.

Fifthly, one of the most important themes developed by the so-called Berkeley cultural-historical tradition of geography is the role humans play as major agents of landscape modification. Sauer invoked for a moral judgment against the "destructive exploitation" of the earth, which found expression even in studies dealing with human's impact on soils, habitats, hydrology, geomorphology, wildlife, vegetation, and the role of human-induced fire (Mikesell 1978:2; Sauer 1952; 1956a; 1956a; 1970; 1975; Speth 1981:232; 1987:11). This persistent interest culminated in the symposium and publication entitled "*Man's Role in Changing the Face of the Earth*" (Thomas 1956), representing the most comprehensive expressions of the Berkeley School of Geography at the time.

Finally, cultural-historical geography has directed its investigation to rural, premodern, non-Western societies (Hugill and Foote 1994:14; Mikesell 1977:460). Some attribute this rural bias to Carl Sauer, who was by predilection an antimodernist who idealized peasant and rural existence, and was reluctant to deal with the modern scene, particularly urban areas, except on problems concerning aboriginal land use, native plant

domesticates, and destructive exploitation (Speth 1977:146-147; West 1980:154). For these reasons, cultural-historical studies have focused on rural Latin American areas. The lines of history are here deeply etched on the land and people, and an understanding of the present influences - language, customs, ways of life- is heavily dependent on the past (Parsons 1973:17; 1989:24).

3.2 Themes of Cultural Geography

A large number of geographers have continued to cultivate this cultural-historical approach and have tried to categorize the main traditional themes or topics. Philip Wagner and Marvin Mikesell (1962:1) proposed five themes as constituting the core of cultural geography: culture, culture area, culture history, cultural landscape, and cultural ecology. Terry Jordan and Lester Rowntree (1986:6) presented their own five components of the field: culture, region, cultural diffusion, cultural ecology, cultural integration, and cultural landscape. De Blij and Muller (1994:354) focused on five main themes: cultural landscape, culture hearths, cultural diffusion, cultural ecology, and culture regions. Three themes are common to all three organizational schemes: cultural region, cultural landscape, and cultural ecology. These are the main topics emphasized in this study, which is concerned with changes over time on the culture region (ancestral lands), the cultural landscape (population distribution and settlements), and cultural ecology (land use and subsistence activities) of the Maleku indigenous peoples.

Today, the five topics identified by these scholars encompass only a portion of what cultural geographers profess and practice. The research of the last three decades has greatly extended cultural geography's scope and enhanced its interpretative power. A re-awakening of interest in cultural geography has arisen from the literature of humanistic geography, from studies on environmental perception and behavior, from new directions in cultural ecology, and from ideas in social, economic, and historical geography. As a result a new set of topics has been developed to increase significantly the number of themes in cultural geography. For example, the broad range of themes has been expanded to fourteen in the book *Re-Reading Cultural Geography* (Foote, Hugill, Smith, and Mathewson 1994), while just six themes are used in *Cultural Geography: Themes, Concerns, and Analysis* (Norton

2000). The traditional and new themes are by no means mutually exclusive or antagonistic. They represent alternative, complementary routes to understanding the issues that concern cultural geographers (Norton 2000:22).

This dissertation study uses the cultural-historical geographic approach and concentrates in its three main constituent elements of cultural region, cultural landscape, and culture ecology. However, considering some of the recent critiques against the cultural-historical approach, this research tries to incorporate some of the new concerns in cultural geography.

Firstly, there has been an explicit preference of cultural-historical geography with the visible material landscape and an implicit reluctance to study the "inner workings of culture," and less tangible, social and cultural forces, which in some cases form the cornerstone in the explanation of spatial patterns of human behavior. It has been suggested to consider the analysis of culture and society and related values, beliefs, and social organization in order to uncover underlying process in human-environment interrelationships (Brookfield 1964:284; Cosgrove 1983:4; Cosgrove and Jackson 1987:96; Duncan 1990:10; English and Mayfield 1972:6; Grossman 1977:129; Jackson 1989:1; Mikesell 1978:5,21). This dissertation certainly uses material culture forms to reconstruct past traditional lands, population and settlements, and subsistence activities and to trace their changes over time. However, other non-material elements such as religion, language, socio-political organization, and cultural values and beliefs, are also considered to uncover the factors causing either change or persistence of the Maleku's geography and culture.

Secondly, there has been also a predilection of cultural-historical geography to study past rural, agrarian, indigenous and non-Western societies, which suggests a curtailment of urban interests and implies a neglect of the present and the future. These biases point to the expanding cultural-historical geographic studies to contemporary and future rural and urbanized societies (Cosgrove and Jackson 1987). Although this dissertation research studies the past conditions of a rural indigenous society, it also gives the same emphasis to contemporary and future geographic and cultural aspects, related to the survival of the Maleku peoples. Thirdly, there is a concern for reconstructing past indigenous lands, population, settlements, and subsistence activities, and documenting changes of these aspects over time. This research is also interested in analyzing causes and processes of cultural change and cultural persistence. Finally, the research pays attention to the historical connections and relationships of the Maleku with dominant neighboring and national societies. Consideration of this larger regional and national context is of fundamental importance to understand its implication for cultural change among this indigenous group, and how their current ethnogeographic patterns have come to be.

3.3 The Study of Latin American Indigenous Peoples

The cultural-historical orientation of geography, especially in North America has been particularly noticeable in the works of Latin Americanist geographers. This cultural and geographical tendency in part reflects Carl Sauer's intellectual development and scholarship, especially his influence on a group of graduate students to do field research in Latin America (Gade 2002:8; Parsons 1973:36-37; 1989:23-24). In addition, this emphasis reflects Latin America's environmental richness and diverse cultural survivals, including the persistence of indigenous cultural influences, impressive archaeological remains, and archival documentation that makes cultural-historical study both feasible and compelling (Mikesell 1978:6; Smith and Foote 1994:29).

In the case of the Central American region, additional factors may have contributed to the interest of North American geographers: proximity or easier access, and the existence of several organized research institutions programs (such as the Organization for Tropical Studies, the *Instituto Interamericano de Ciencias Agrícolas*, and *Centro Agronómico Tropical de Investigación y Enseñanza*).

Cultural geographers working in Latin America, and particularly in Central America, have been fascinated with research issues dealing with indigenous peoples. This geographic research is part of the tradition of ethnogeography, which focuses on past and present geographic and ecological conditions of culture groups, and changes over time in their geographic patterns, cultural landscapes, and subsistence activities, with a frequent

emphasis on mapping and local environmental knowledge (Mathewson 1993:129; Samson 2002:76; West 1998:67).

Ethnogeography is essentially the same as cultural-historical geography focusing on ethnic groups and cultural regions with a strong historical dimension. William Davidson (1977: 283) defines the content and focus of ethnogeography as 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 lives off its lands. These four aspects coincide with the three topics of cultural-historical geography: cultural regions, cultural landscapes, and cultural ecology, in studies of indigenous peoples. As a geographic sub-discipline, ethnogeography also shows concern for spatial relationships, human-environment interaction, and the expression of these in the landscape. This tradition is continually developing and being defined by the research being done in Central America today. Its presence is evident in the *Geoscience and Man Publication* series published by the Louisiana State University and the *Journal of Latin American Geography*.

3.4 Ethnogeographic Research in Central America

Depopulation and loss of territories on which to live and practice their traditional modes of subsistence and settlement patterns, has been a dominant historical-geographical process in the life of indigenous peoples since the arrival of Europeans. Cultural geographers or ethnogeographers have followed several research trajectories to reconstruct, to document, and to understand past and present geographic and cultural conditions of various indigenous groups in Central America.

The aboriginal contact population and subsequent post conquest decline has been reconstructed using census and colonial documents in national archives, including Indian written testimonies. Estimation of indigenous populations and their decline have been documented for Central America, including Panama (Denevan 1992), for Guatemala (Lovell and Lutz 1994), for Nicaragua (Newson 1982; 1986; 1987; Radell 1992; Stanislawski 1983), and for specific regions such as the Totonicapán Department and the Cuchumatán highlands

in Guatemala (Lovell 1992; 1988;Veblen 1977;). These studies illustrate the demographic collapse and cultural changes experienced by native populations at the time of Spanish conquest and colonial periods, and assess the different factors explaining their demographic decline.

Geographers have also used different sources and techniques to determine the historical extent of past culture regions occupied by specific indigenous groups. One particular technique has been to plot the distribution of present-day indigenous place names, which give an approximation of the former extent of the groups' speech. In this way, it was determined that the Lenca probably once occupied much of western Honduras and eastern El Salvador prior to the Spanish arrival (West 1958; 1998), and that the Tawahka Sumu lived in an extensive area of the eastern part of that country in Mosquitia (Davidson and Cruz 1995). In other cases, when archaeological evidence is available and the cultural relationships and affinities between pre-Colombian and post-contact indigenous groups have been clearly established, geographers have used this information to delimit indigenous historical lands. This approach proved to be helpful in mapping the traditional lands of the Pech indigenous group in Honduras at the time of contact (Davidson 1991; Samson 1997)

In other cases, geographers have used the visible, material elements that are important components of the landscape to define cultural geographic regions. The most obvious and visible element of material culture studied and mapped is folk housing. The house forms, plant types, decorations, construction materials, and construction methods served as indicators of the cultural heritage of the builders and, therefore, of the cultural heritage of the region in which particular forms clustered. Looking at these cultural forms of the geographic landscape, a tradition renowned through the writings of Fred Kniffen (1936; 1965; 1990). Geographers have done this type of scholarship in northeastern Mexico (Brown 2002) and central Panamá (Fuson 1964).

The culture history of indigenous peoples during colonial times has received geographic attention. By combining field research and historical research with primary documents, cultural geographers have been able to reconstruct and document the process of depopulation, territorial reduction, and cultural disruption experienced by the Tol, Tawahka, Pech, and Garífuna of Honduras (Davidson 1974; 1985; 1987; 1991; Samson 1997). These studies concluded that such dramatic geographic and cultural changes were attributed to disease, mining, slavery, and missionary activities.

In the same line of investigation, lately geographers have focused more on recent and present changes on indigenous' settlement patterns and subsistence systems. The Miskito Indians in eastern Nicaragua has been seriously undermined by the cash economy causing serious ecological disruption (Nietschmann 1973; 1974a; 1977; 1979b). Culturalecological factors have likewise induced recent changes on village settlement and subsistence patterns among the Emberá and Wounaan Indians of the Darién, eastern Panamá (Herlihy 1985a; 1985b; 1986). Garífuna women's role in agriculture is changing with the introduction of citrus production in Hopkings, Belize (Bliss 1992). As a result of the twentieth-century eastward expansion of Honduran population and economic activities, the Pech are experiencing loss of lands and changes on traditional settlement and subsistence patterns (Samson 1997; 2002). Recent abandonment of Garifuna settlements and loss of cultural identity in Nicaragua and Honduras are attributed to out-migration to urban areas, construction of large tourist resorts, and marriages outside the communities (Davidson 1976a; 1976b; 1980; 1982). All these works illustrate how indigenous peoples experience cultural and geographic transformations as they are increasingly incorporated into developing national settings.

In the last two decades, geographers and other scholars are contributing to defend ancient indigenous rights against the incursion of newcomers and to promote indigenous territorial autonomy and self-determination. The contribution of cultural geography is reflected in the mapping of indigenous people's distribution, their lands, and their resource use patterns. Two ethnocartographical approaches are identified according to the research methods used. One employs more traditional research methods such as direct and participant observation, collaborative research, interviews, oral histories, and analysis of toponym and documentary sources. The other, of more recent development, utilizes bottom-up participatory research methods. Ethnocartographical contributions using traditional research approaches played key roles in mapping present location and distribution of Central American Indian groups (Counce 1990; Davidson and Counce 1989). These geographers used three criteria to identify the indigenous population: self-identification as an Indian, the use of an Amerindian language, and enumeration in the national census. Along the with the review of recent literature, field work, and several key informants, they produced a 1:5,000,000 scale map of the Indian groups in Central America, accompanied with population statistics.

Using aerial photographs, in-situ village censuses, and interpolation from the most recent national censuses, the population and settlement distribution of the Garífuna in the eastern coast of Central America has been documented in detail, as well as the four spatial units or habitats by which the Garífuna organized their culture in the physical world (Davidson 1976a; 1982). Maya historical land rights in Belize have been also documented as a baseline to support their recent struggle with the government to allocate 500,000 acres of land to the Toledo Maya, with legal rights vested in the community and not in the government (Berkey 1994). The territory occupied by the Tawahka Indians of Honduras during the last four centuries was delimited to support this indigenous group in their process to obtain legal titles for their historical homelands (Davidson and Cruz 1995).

Indigenous peoples usually have elaborate place name knowledge and welldeveloped cognitive spatial abilities. Geographers and other field researchers working in collaboration with indigenous informants have taken advantage of this geographic knowledge to produce settlement and land maps. Through collaborative research methods with indigenous informants, Peter Herlihy has produced large-scale maps of settlements and resource-use areas in the Darién and Mosquitia regions of Panamá and Honduras respectively (Herlihy 1993; 2002). Collaborating with local indigenous organizations, he produced detailed and accurate maps of Tawahka indigenous lands in the Honduran Mosquitia (Herlihy and Leake 1990; Herlihy 1993; 1995b).

The other new approach is the community-based, participatory research mapping methods that have been used in different parts of Central America to produce Western-style standard maps and descriptive information about indigenous lands and livelihoods, with the aim of empowering local communities over land and resources (Herlihy 2002:144). This information is being used to support indigenous initiatives to secure their lands, resources, identity, and self-government. The geographer Peter Herlihy developed the participatory mapping approach together with environmentalist Andrew Leake in the Honduran Mosquitia in 1992 (Herlihy and Leake 1997; Herlihy and Knapp 2003). He (1999; 2001) further articulated the use of participatory mapping as a keystone activity in the development of a land zoning system and management plan for the Río Plátano Biosphere in the Honduran Mosquitia. Similar projects have been carried out among the Emberá, Wounaan, and Kuna indigenous peoples of Panamá's Darién region (Denniston 1994; González, Herrera and Chapin 1995; Herlihy 2003), along the Miskito Coast of Nicaragua (Nietschmann 1995a; 1995b; 1997; Dana 1998), in indigenous territories of southern Belize (TMCC/TAA 1997), in Nicaragua's Bosawas Reserve (Stocks 1996; Luz 1997), and at Awas Tingni (Anaya and MacDonald 1995). For discussion of these and other participatory mapping projects see the recent volume by geographers Herlihy and Knapp (2003) entitled "Participatory Mapping of Indigenous Lands in Latin America."

The participatory research mapping methodology involves local people and researchers in a process to document their cognitive spatial knowledge through drawing sketch maps and collecting place name locations that show where peoples live and how they use resources. Then, community representatives and researchers working together transform the consensual sketch maps and place-names locations into descriptive data and standard maps that are intelligible to both themselves and to outsiders. The indigenous peoples have found the process and resulting maps very useful in pressing their claims for land, resources, and territory (Anaya and MacDonald 1995; Denniston 1994; Herlihy 2002a:144; Herlihy and Knapp, 2002b:259; Nietschmann 1995a; 1995b; 1997).

My dissertation research follows in the tradition of cultural-historical geography in that it concentrates in three of the most important traditional topics or themes: culture region, culture landscape, and culture ecology. Although there is an emphasis in the study of culture material features or elements of the landscape such as settlements, houses, population, land use patterns, and toponyms, other non-material elements such as religion, language, socio-political organization, and cultural values and beliefs are also considered. This research also continues with the cultural-historical geographic tradition of combining archival work with intensive field research, including collaborative research methods, in order to reconstruct past Maleku's populations, lands, settlements, and subsistence activities, and other cultural complexes, and to document their changes through time.

Cultural-historical geography provides a good approach to identify and examine causes and processes of cultural change and cultural persistence among the Maleku by focusing on their historical contacts and relationships with dominant neighbors and national societies. The analysis of the broader regional and national geographic contexts helps to discern the historical factors of cultural change among the Maleku and to explain their present cultural survival as an indigenous group. Finally, as a geographic sub-discipline cultural-historical geography also shows concern for spatial relationships, humanenvironment interactions, and the expression of these in the landscape.

4. Methodology of this Study

The research upon which this study is based was carried out in two phases, one archival research, and the other field research. Most library and archival research was done through the libraries of the University of Kansas, and archives and libraries in Costa Rica. The interlibrary loan system was used to borrow materials from other libraries throughout the United States. Field research was conducted among the Maleku indigenous people of the Guatuso Indian Reserve, northern Costa Rica from June to November 2000. Throughout the field investigation, I undertook participant observation, conducted interviews and with the collaboration of local investigators, administered a census and carried out field mapping. After archival and field research was completed, quantitative and qualitative information was compiled for analysis and map production. This chapter provides an account of the way in which the research was conducted and some of the problems encountered, and describes the methodology used in this study.

4.1 Fieldwork Conditions

Before beginning fieldwork in Costa Rica, I wrote letters to some Maleku friends explaining the nature and purposes of the proposed research. They suggested that I get the approval of the *Asociación de Desarrollo Integral de la Reserva Indígena de Guatuso* (ADIRIG), the Reserve's governing political organization, in order to conduct research in the Reserve. Once I got to the Reserve, the first thing I did was to schedule a meeting with the six members of the ADIRIG. I gave them a full description of the research project, its objectives, methodology, expected products, and its relevance for the indigenous community.

I obtained the approval of the ADIRIG under various conditions. Firstly, I had to swear that the main reason for doing this research was to earn an academic degree, and not to make any money. The Maleku resent scholars who have come into their communities asking for information about their history, culture, and language, but never gave their results back to the communities. They believe these scholars were making money at their expense by writing books, articles, and carrying out financed research projects. Secondly, I agreed to give them copies of the dissertation (translated into Spanish), the maps and written documents compiled from the different libraries and archives. Finally, I also agreed to pay 2,000 colones (\$8 U.S.) daily to any community member permanently involved in the research. The ADIRIG named some potential individuals who could participate as investigators and informants.

Considering the names provided by the ADIRIG and the recommendations made by my friends, I selected three local investigators, one for each community: Francisco Elizondo, Bienvenido Cruz, and Eligio Cruz. They were native-born and long-standing residents of the community; who were fluent and literate in Spanish and Maleku, wellknown and respected individuals, and with detailed knowledge of the region's geography and the native culture. In the first meeting with the local investigators, we reviewed the nature of the research and agreed on the amount of pay. We also discussed the responsibilities of the principal researcher and local investigators, and the implementation of two of the important field-based components of the research that involved local communities directly: a census of the entire study population, and mapping of the Maleku historical lands.

I had originally intended to achieve a fair mastery of the Maleku language before beginning intensive interviewing. However, funding and time constraints made this goal impossible and knowledge of the native language was not essential for data collection, since the vast majority of the population was fluent in Spanish. Nevertheless, I made an effort to learn as much of the native language as possible throughout my fieldwork experience. This knowledge was helpful in collecting toponyms of geographic features, and names of animal and plant species.

I spent the period from June to November 2000 doing field research. During this time, I lived in Tonjibe with a family, which included my host, his wife, and three children. They provided food, lodging, and laundry services in exchange for a relatively low monthly payment. I had my own bedroom, but shared the only house bathroom with the other family members. The daily diet consisted of rice and beans supplemented by plantain, manioc, avocado, or eggs, and only occasionally, it included beef or fish. The head of the family,

Leonidas, taught the Maleku language at Margarita and Tonjibe primary schools. He was also one of my local informants. Compared to the other Tonjibe families, the people with whom I shared quarters enjoyed better living conditions and had a higher level of education.

I visited regularly the other two nearby communities of Margarita and El Sol to collect additional comparative data. At the beginning, I was classed as a "chiuti," or "white," and this created some difficulties. The Maleku are very suspicious of outsiders who come into their communities. They are extremely reticent, especially elders, to talk to outsiders about themselves. This attitude may be the result of a long and sad experience with outsiders, who have considered them lazy, dirty, ignorant, and culturally backward. And clearly they have been cheated in their economic dealing with outsiders resulting in the loss of most of their lands and resources, which is detailed in this dissertation. Thus, at least initially, they resented my presence in their community, and my motives were suspect. Initially attempts to delve into the mysteries of their past and culture were met with distrust.

During my first days in Tonjibe different community members asked me about my real purposes for being there. And one by one, I patiently explained the reasons for my presence. I also began to engage with community members in several activities. I helped fix a broken community water aqueduct, cooperated with agricultural activities, participated in short fishing and hunting trips, and accompanied communal leaders to meet government functionaries to discuss housing, health, and education programs, and small economic projects. In addition, I played soccer in the afternoons, observed night rehearsals of the local theater group, and even helped some high school students with their English homework. Engaging with them in those activities definitely helped me to gain their confidence. After about a month of living among them, my presence became generally accepted by most people and excellent rapport had been established with several families.

In the first days of my fieldwork, I honestly felt that this venture among the Maleku seemed doomed to failure due to the suspicion of the Maleku. However, with patience, and an open mind, I gained their trust. In the end, this venture turned out to be a personally satisfying and scientifically rewarding experience.

Several aspects made it physically possible for a single investigator in a six-month period to collect the necessary field data. First of all, the study population was very small and concentrated in only three communities. Secondly, the three communities were only 2 and 4 kilometers apart, being reachable by vehicles year round. Thirdly, the researcher had good background knowledge of the Maleku people and the geography of their reserve and the Río Frío region. Finally, the local investigators proved to be hard working individuals, who truly committed themselves to the research, making the data collection process highly productive and enjoyable.

4.2 Archival Research

The archival research consisted of locating, reviewing, and analyzing primary and secondary sources of information on the Maleku indigenous peoples at the University of Kansas libraries and at different libraries and archives in Costa Rica.

Linguistic, genetic, and archaeological studies of modern indigenous groups in Southern Central America, as well as oral stories on the Maleku's origins collected by the researcher and the linguist Adolfo Constenla, and several secondary written sources were used to elucidate the cultural origins of the Maleku people. Early colonial reports located at the Costa Rican National Library and National Archives, provided useful information on the early Spanish expeditions to find the Maleku, and then, to conquer them. The examination of these colonial documents and the physical geography of the Río Frío watershed gave insights into the reasons of why this indigenous group remained isolated and unconquered throughout the conquest and colonial periods, despite Spanish attempts to subjugate them.

Nineteenth century reports by European and North American travelers, books, and magazine articles obtained through the facilities of the University of Kansas and the University of Costa Rica libraries provided additional sources for uncovering the geopolitical and economic factors that brought outsiders' attention to the little known Maleku people around mid-19th century. These historical sources also documented the mid-19th century expeditions to the Río Frío watershed that resulted in the "opening" of Maleku ancestral lands to the outside world with the arrival of Nicaraguan rubber gatherers.

One of the most outstanding references on 19th century conditions among the Maleku are the reports of the five trips made by Bishop Bernardo Thiel to the Maleku communities, stored in Catholic church archives in San José. Additional information related to these ecclesiastical visits was found in several issues of the "Diario Oficial la Gaceta," the official newspaper of the Costa Rican National Congress, and other contemporaneous publications of the year 1882. These primary accounts provided demographic and ethnographic information for estimating the Maleku's population size and for reconstructing their settlement pattern and traditional subsistence activities for the period. These primary sources of information along with other travel reports, also served to unveil the dramatic changes experienced by the Maleku as a result of the late 19th century rubber activity and work of missionaries. The culture history of the Maleku could be divided into the life before and the life after the rubber gatherers and missionaries showed up.

Published literature on the Maleku in the 20th century is limited. Scholars failed to address the effects that state policies, church actions, colonization, new land use systems, and commercial activities have had on the indigenous population, culture, settlements, lands, and resources. Nevertheless a few published materials served to recreate the sociocultural and territorial conditions of the Maleku in specific periods of time, and to show the changes on these particular aspects throughout the twentieth century. One of the most important sources on the Maleku during the period is the ecclesiastical expedition of Antonio Monestel, Bishop of Alajuela who visited their communities in 1923. Despite its prejudicial remarks about the Maleku, this book provides useful historical information about their population size, settlements, livelihood activities, and other cultural aspects. During the 1950s and 1960s the sources included an unpublished map, fieldwork and government reports, a linguistic thesis and a personal narrative of the first primary school teacher who lived among the Maleku from 1953 to 1957. Newspaper articles provided information on the living conditions and problems faced by the Maleku during the last three decades.

Current socio-economic conditions of the Maleku were characterized using quantitative data from the 2000 indigenous census conducted by the *Instituto Nacional de Estadísticas y Censos* (INEC). The 1996 land survey study of the Guatuso Indian Reserve

by the Iriria Tsochok Foundation served to estimate the amount of land controlled by the Maleku, and to show the unequal distribution of land between the Maleku and non-Indians living in the reserve.

4.3 Field Research

Fieldwork research methods for collecting information were designed to incorporate the knowledge that indigenous peoples have of their own culture, history, lands, and resource use as an alternative way to supplement and complement the information gathered through archival work. Field research methods used to gather data directly from peoples included participant observation and collaborative research.

4.3.1 Participant Observation

Participant observation was done in the study area throughout the duration of the field research. This method of data collection is most closely associated with cultural anthropologists and ethnographers but has been adopted by cultural geographers in rural settings in developing countries (Price and Lewis 1993:9). Trained field workers, sensitive to both culture and environment and willing to live under local conditions, most often among indigenous peoples, have been a fundamental part of the cultural-historical geographic approach practiced by Sauer and his followers.

Participant observation allowed me to collect qualitative ethnographic data that complemented the written historical and contemporary information, allowing for a greater cultural and geographical understanding of the Maleku indigenous peoples. This generally consists of collecting data about a group while the researcher is taking part in the daily activities of the group under investigation. By living for an extended period of time and fully participating as a member of the group, the researcher seeks to combine visible activities with intangible meanings, feelings, beliefs, and attitudes that other members experience (Stoddard 1982:118). The participant-observer does the research, collecting and interpreting the data and publishing the research results. Although participant observation produces qualitative data that is difficult to replicate, contains a great deal of subjectivity and interpretation on the part of the researcher, and is too limited to enable generalizations, it does allow the researcher to reveal the less visible connections that social groups establish with one another and with the places they inhabit, cultivate, defend, and dominate.

I engaged in community activities as a strategy to gain people's confidence and to gather useful information. I participated in agricultural, hunting, and fishing activities, social and sport events, and community meetings. I also took advantage of every opportunity to talk to people: while walking from one palenque to another, in the bus, at the retail store, or approaching them when sitting in their front houses during their leisure time. These activities provided unique opportunities to conduct short interviews and talks. Data was recorded through audio-recording, written notes, and photographs. I asked general questions about community problems, relations with non-Indians living in the Reserve, economic activities, land tenure, differences that distinguished them from their non-Indian neighbors, changes in their way of life, the causes for these changes, and the major problems or threats to their survival.

The one-day fishing and hunting trips and agricultural activities gave me the opportunity to interact and spend more time talking to people. For this reason, more specific questions were asked to the informants, trying always to differentiate between past and present conditions. Questions about agriculture revolved around types of crops, land preparation, methods of planting, cropping systems, control of weed and pests, land ownership, location of agricultural lands, division of labor, and cooperative labor. The hunting and fishing questions targeted the favorite game animals and fish captured, the methods used, restrictions and taboos surrounding these activities, hunting and fishing seasons, names and locations of hunting and fishing sites, prey redistribution rules, and food preservation methods. I also asked about the gathering of forest products, their names and uses, and collecting periods.

As part of participant observation method of data collection, I interviewed seven key local informants (including two women), recognized for their comprehensive knowledge of their group's past and present life conditions. The interview included seven major topics organized chronologically:

- a) Cultural origins: How and where the Maleku were created?
- b) Past population, settlements, and subsistence activities: Demographic estimates, names of settlements, and traditional subsistence activities.
- c) Nicaraguan rubber gatherers: Their actions and consequences
- d) Bishop Thiel's ecclesiastical visits: What they meant for the Maleku?
- e) Nicaraguan and Costa Rican settlement expansion: Their effects on the native population, land, and resources.
- f) The government actions: Their positive and negative consequences.
- g) Present-day conditions: Major problems and threats affecting the Maleku communities.

The interviews were tape-recorded. The transcriptions of the interviews showed that the local informants were more familiar with topics such as past traditional subsistence activities, the Nicaraguan rubber gatherers, the Nicaraguan and Costa Rican settlement expansion, the government actions, and the present-day conditions of the Maleku communities. In general, local informants had less detailed knowledge about topics such as cultural origins of the group, past population size, location and names of historical settlements, and Bishop Thiel's ecclesiastical visits. Despite some discrepancies, the data obtained from the different informants served to confirm the accuracy of the information collected through participant observation. Both participant observation and interviews produced valuable data that helped to document and explain the changes undergone by the Maleku's population, lands, settlements, and subsistence activities over the last century. The information was also used to characterize the current socio-cultural and economic conditions of the Maleku communities, including the most important problems and threats currently faced by the communities.

4.3.2 Collaborative Research

Collaborative research can be traced to the work of Sol Tax and his students with the Fox Project in the 1940s and 1950s. This project developed the action or principle "learning and helping," adopted by "advocacy" anthropologists in the 1960s to conduct applied research in ethnic minority communities. By the mid-1970s, ethnic minorities communities began to see the need for information in the advocacy process, permitting the development of a new configuration in the integration of research and action, in which anthropologists became collaborators with community activists in research directed toward social change (Schensul and Stull 1987:7). Collaborative research refers to research conducted jointly with those being studied. The researcher collects the data not only with the cooperation of the local community, but with its assistance and understanding of the research agenda. Common is the aim of making the research more responsible to local needs and interests, as well as to the needs and interest of the researcher (Gibson 1987:108). The researcher thus works with local people to apply research to meet needs of a population, and in the process, enables the researcher and local residents to learn from each other and forge productive partnerships.

The dissertation research included a collaborative research component. This approach was chosen in order to involve local people in the research process. Three local investigators, one for each community, were selected to work collaboratively with the researcher. The three selected local investigators filled the following requirements: were native native-born and long-standing residents of the community; fluent and literate in Spanish and Maleku, well-known and respected individuals; and with knowledge of the region's geography and native culture. In the first meeting with local investigators, we discussed the nature of the research, the responsibilities of the researcher and the local investigators, and the implementation of three collaborative components of the research: 1) a census of the study population, 2) a map of the Maleku historical lands, and 3) description of the historical settlement and subsistence patterns.

4.3.2.1 Community Population Census

There are 77 houses in the three Maleku communities: 11 in El Sol, 31 in Margarita, and 35 in Tonjibe. The local investigators and I visited all the houses in their own communities. In each house we collected information on age, sex, occupation, languages spoken, ethnicity, families living in, and family members living outside the reserve. In these communities it is common to find Maleku men and women forming multi-ethnic families with other indigenous and non-Indian persons. For this reason, ethnicity information was included in the census, which was recorded according to self-identification. Local investigators assumed the responsibility to introduce me to the families. They requested the participation of the heads of households in the census, and explained to them its purpose. Fortunately, all the families agreed to take part in the study. The local investigators

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administered the census' questionnaires to the household members, while my role consisted of recording the answers in a notebook. After the census was completed, I checked the collected data with the local investigators and entered it directly into spreadsheets (MS Excel) using a laptop computer. This census provided detailed and comparable information on the residents of each of the three Maleku communities.

4.3.2.2 Field Mapping

Field mapping focused on the collection of geographical place-names or toponyms used by the Maleku villagers in their own language, and working with local investigators to plot their precise locations on base maps at 1:50,000 scale. on recording the precise locations of the collected geographical names. People use place-names to describe the locations of important sites, areas or places that have particular cultural and material values and meanings for them. Toponyms remain as a word map of the past. Every topographical feature, both large and small, has its name. The indigenous peoples attach names even to the seemingly most trivial features of the land. These names not only reveal a great deal about what people in a particular location did or believed, but usually provide evidence of the historical occupation or ownership of an area by a particular ethnic group. As a result, it is possible to make a generalized reconstruction of the past landscape occupied by a particular culture group by plotting toponyms on a map (Copley 1963:ix-xi; 1968:7-8). Toponyms are an invaluable source, which supplement the facts and uncertainties of documenting history and archaeology. When there is not historical and archaeological evidence, or other visible evidence of the cultural landscape has been erased, the distribution of geographical names has been used by geographers as a basis for delimiting past indigenous lands or territories.

In the first working session with local investigators, we identified eight different categories of places, sites or areas, which were and are important to the Maleku for their uses, values, meanings or beliefs. These categories included:

- 1) Settlement sites
- 2) Subsistence areas; including hunting, fishing, gathering, and farming places;
- 3) Relief features; including hills, ridges, slopes, hillsides, mountains, volcanoes;
- Water features; including rivers, small streams, creeks, oxbow lagoons, seasonal and permanent lagoons, swamps, and waterfalls;

- 5) Sacred places;
- 6) Resting places; including located along trails connecting palenques, or conducing to farming, fishing, and hunting grounds;
- Camping places; including temporal houses for several days hunting, fishing, gathering, or farming.

In the next working session, I sat down with the local investigators and prepared a list with all the geographical names they knew in each category. For each named geographical feature, the following information was required: 1) name in native language, 2) meaning literally or figuratively, 3) approximate location and, 4) additional information such as stories, legends, events, and importance of the place or site. Each geographical name with its native language, meaning, and location was recorded in large blank pieces of paper, using color pens. In this way, we not only recorded but also validated the information for each place name. Whenever disagreements arose, I gave the local investigators the chance to discuss them, and then, made the pertinent corrections. In a few particular cases when an agreement was not reached right away, the local investigators consulted other members of the community.

The next step was to plot all the names collected and revised on maps and aerial photographs. Some features such as settlements, rivers, streams, lagoons, hills, ridges, and mountains were easy to locate on 1:50,000 topographic sheets. However, smaller streams, creeks, swamps, and lagoons, and settlements were visible on black-and-white aerial photographs at scale 1:35,000 instead. These photos were enlarged to approximately 1:10,000 scale and used to update information on the topographic sheets making our task of plotting toponimic field data much easier. In most cases, the toponyms were added to the topographic maps and aerial photographs without difficulties. However, in other cases because of the high density of named features, the place names were identified by codes on the maps and photos, with each code relating to a name in the compiled list.

Some geographical names were not possible to locate on topographic maps or aerial photos. For this reason, several field trips were organized into different parts of the Guatuso Indian Reserves and the larger Río Frío watershed. On foot, by boat, and by horse, the local investigators and I reached the sites of past settlements, cemeteries, sacred and prohibitive places, resting and camping sites, and places where the Maleku used to cultivate, fish, and

hunt. Their exact locations were directly plotted onto the enlarged aerial photos. We also verified the locations of some place names, and while traveling in the field, the local researchers identified new geographical names that were immediately plotted onto air photos.

The information on geographic names collected through collaborative research was used to map the Maleku's historical lands and settlements. The list of all place names gathered with all the appropriate information about the named features was entered into spreadsheets (MS Excel). The place-names on the 1:50,000 scale topographic sheets and aerial photos were plotted on clean copies of the 1:50,000 scale maps, and then, directly entered into existing digital topographic base maps, using MapInfo GIS computer software. After the toponimic data was plotted into the digital topographic sheets, they were joined together and edited. Following the distribution of the place names on the topographic base map, particularly of rivers, hunting, and fishing sites, I drew the boundaries of the group's past lands. The final map shows the possible extension of the Maleku historical territory. The locations of past settlements were added as a separate data layer to the digital topographic sheets in order to produce a separate map, showing the distribution of 17 settlements along some locally known rivers and streams.

4.3.2.3 Past Settlement and Subsistence Activities

The researcher worked together with the three local investigators in the reconstruction of the Maleku's past settlement patterns. In another working session with the local investigators, we identified at least four geographical scales of settlement organization and integration: 1) the site, 2) the multifamily unit, 3) the community, and 4) the set of communities. Each one of these was then described in detail. Our discussion focused on the geographic, socio-political, and other factors explaining the nature of the Maleku's past settlement pattern. In addition, written historical sources and the interviews conducted by the researcher to seven key local informants also provided good data that help describe their historical settlement.

The description of the Maleku past subsistence activities was done mainly through the collaborative work between the researcher and the three local investigators, Francisco Elizondo, Bienvenido Cruz, and Eligio Cruz. Such description was organized around five food-procuring activities: agriculture, hunting, fishing, gathering, and animal husbandry. The three local researchers described each activity in terms of its main distinctive ecological, technological, social, and geographical aspects. The information was recorded on a large poster pad by the researcher. Next, an inventory of the main crop, game animal, fish, plant species, and other materials procured or produced from the environment by the Maleku was prepared. For each species enlisted in Spanish, the correspondent name in Maleku was added. For some particular animals, fish, crops, and plants their different uses and meanings were also added to the inventory. The animals that the Maleku were forbidden to eat for different reasons were included in a separate list. Additional valuable information to describe Maleku's past livelihood strategies was provided by the personal interviews conducted by the researcher with seven key local informants, the field observations and conversations with local residents made by the researcher while participating in their fishing, hunting, and agricultural activities, and some historical documents.

The information obtained from archival and field research was compiled for analysis and map production at the University of Kansas and the University of Costa Rica. Combining the data obtained from primary and secondary sources and from field research methods, the mid-nineteenth century Maleku's population, lands, settlement, and subsistence activities were reconstructed. Then, four particular stages or moments in time were selected based on the amount and quality of information available, particularly written sources: late 19th century, early 20th century, mid-20th century, and millennium. The description of the group's geographic and cultural situation was written for each time period. Using the mid-nineteenth century reconstruction of Maleku's population, lands, settlement, and subsistence activities as a baseline, with the subsequent four moments in time, provided evidence on the sequence and the amount of change on these geographical and cultural aspects.

The analysis of the historical contacts and relationships of the Maleku with other neighboring and national societies, and state institutions uncovered some of the processes that have caused significance changes among this indigenous group since the end of the 19th century. Finally, the analysis of the relationship between land and indigenous cultural identity provided valuable insights into the factors explaining why the Maleku have survived and maintained their cultural identity despite losing practically all their historical lands and resources.

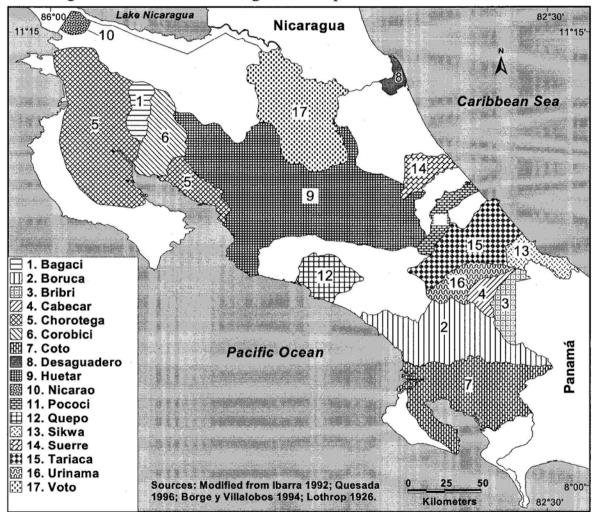
5. Who and Where Were the Maleku Origins?

The first mention of the Maleku in the historical record apparently does not occur until the middle of the 18th century, under the name of Guatuso Indians. Prior to this time, the Maleku or Guatuso Indians may have remained virtually unknown to the Spaniards. Apparently, this late discovery led some people to believe the group's ancestors came from somewhere else away from the Río Frío area. Overtime, different views on Maleku origins emerged, ranging from a simple relocation of an indigenous group to multiple migrations of distinct groups, who mixed together to produce a new cultural group. This chapter describes and evaluates these different hypotheses concerning the origins of the Maleku, and tries to piece together the ethnographic evidence available in order to give a complete story of their origin.

5.1 The Maleku as the Descendants of the Huetar

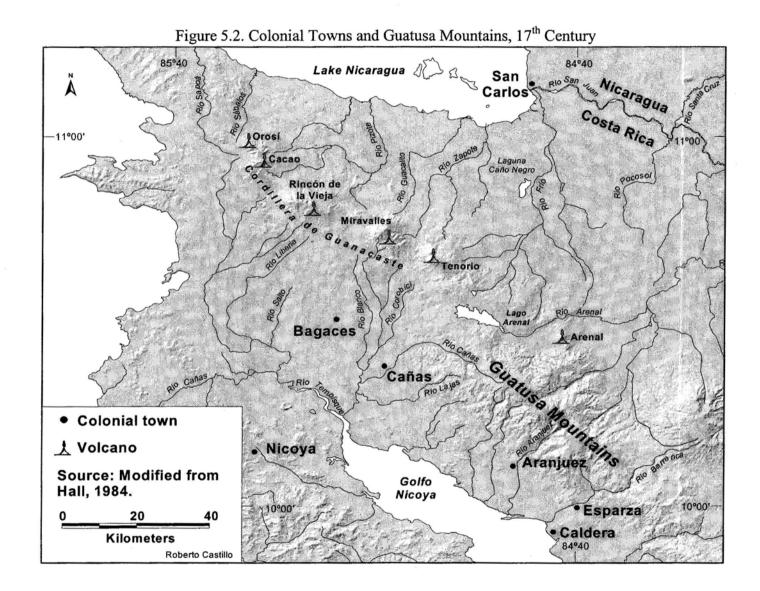
The first hypothesis considers the Maleku as descendants of the Huetar indigenous people, who migrated from the central Pacific region to the northern plains of the Río Frío by the end of the 17th century. At contact time, the Huetar, a Chibchan-speaking people, occupied a large portion of the Costa Rican territory, including the Central Valley (Figure 5.1). The Huetar population size at the beginning of the 16th century is unknown. Colonial documents of the 1520s recorded an Indian population in the Costa Rican province of 27,200 (Thiel 1902:8), but this figure was based on a very incomplete reconnaissance. The population may well have been as high as 400,000 (Denevan 1976:291). Nevertheless, by 1569 practically all the Huetar of the Central Valley had been distributed among *encomenderos*, entrusted with the Indians' well being and their conversion to Christianity (Perafán de Rivera 1883:419-422; 1886:23-29).

According to Esteban Lorenzo de Tristán, Bishop of Nicaragua and Costa Rica (1777-1873), in 1685 English pirates led by Captain Sharp destroyed the town of Esparza, situated near the shores of the Gulf of Nicoya, on the Pacific slope. Huetar indigenous peoples, living in this village and the nearby towns of Garabito and Aranjuez, escaped to the northern slopes of the Tilarán Cordillera and the Río Frío (Figure 5.2) (De Paula Soto





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1972a:296; Fernández 1889:27; García Peláez 1852:142; Squier 1858:407-408; Thiel 1902:134). No effort was made to bring the fugitive Huetar back, probably because the Spaniards and Mestizos were also urged to move into towns on the Central Valley and northeastern Guanacaste Peninsula. The village of Esparza remained inhabited until 1693, when Governor Manuel de Bustamante ordered its reconstruction (Chacón 1967:50-51).

The idea of the Huetar being the ancestors of the Maleku was later adopted by some scholars such as Jorge Lines (Lines 1938), Eduard Conzemius (1930), and Frederick Boyle (1868). Important linguistic and cultural aspects also work against the Maleku-Huetar connection. The comparison of the Huetar language, which disappeared by the end of the 19th century, and the current Maleku language shows that both languages are distinct, even though both descended from the same proto-Chibchan language. In addition, the comparison of other past and present culture elements such as type of houses, clothing, religion, and burial customs also indicates that both indigenous groups were quite distinctive (Constenla 1975; 1986; 1990; 1998; Porras 1959; Quesada 1990; 1992; 1996; 1998; Thiel 1882; 1883).

5.2 The Corobicí as the Ancestors of the Maleku

The second hypothesis conceives the Corobicí as the cultural ancestors of the present-day Maleku indigenous people. The early colonial documents show that the Corobicí occupied a band of territory extending from the Gulf of Nicoya to the southern slopes of the Guanacaste and Tilarán Cordilleras, encompassing rivers such as Tenorio, Corobicí, Santa Rosa, Cañas, and Lajas (Figure 5.3). The Spanish explorer Gil González de Avila encountered between six and seven hundred Corobicí peoples living throughout this region in 1522. Their principal chief's name was Corovesí (Corobicí), which was then used to designate all the people who spoke the language (Castañeda 1883:54; Cerezeda 1883:29-30; 1889:34-36; 1954:87-88; 1976:33-35; González 1975:52-53).

According to Pedro Morel de Santa Cruz, Bishop of Nicaragua and Costa Rica, who visited Costa Rica in 1751, the Corobicí were abused and exploited by the Spanish *encomenderos*. For this reason around 1569, they fled to the other side of the Guanacaste Cordillera and settled along the Río Frío, where they remained isolated and ignored (Morel

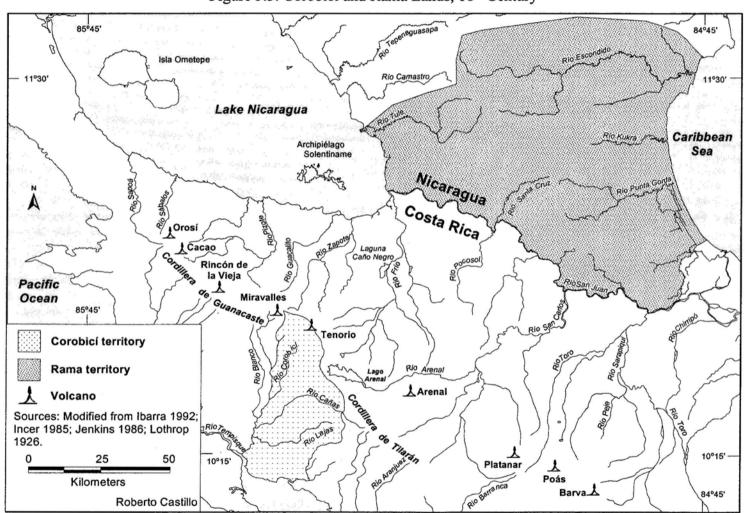


Figure 5.3. Corobicí and Rama Lands, 16th Century

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de Santa Cruz 1994:88). After 1569, the Corobicí were not mentioned anymore in the historical records, and it was not until the 1750s that the first references to their existence appeared under the name of Guatuso Indians. The idea of the Corobicí as forefathers of the present-day Maleku was widely accepted later by several scholars such as Cleto González (1906), Walter Lehmann (1920), Rubén Yglesias (1942), Samuel Lothrop (1926), Frederick Johnson (1963), and Jaime Incer (1989).

Among these scholars, Walter Lehmann provided the best arguments to support this idea. From the examination of historical documents, and archaeological and linguistic field observations, he concluded that the Corobicí had occupied the islands of Solentiname and Ometepe in Lake Nicaragua. The historical sources clearly indicate that by the time the Spaniards arrived, another language very different from the Chorotega-Mangue, Nicarao-Nahuatl, and Huetar languages was spoken in the Guanacaste region and the Solentiname and Ometepe Islands (Cibdad Real 1975:308; Fernández de Oviedo 1855:108; 1889:40-41; Herrera 1945:204-205; 1975:29; López Gómara 1852:283). This language has been suggested to be the Corobicí (Lehmann 1920:376-377).

In 1909, Lehmann found on the Solentiname Islands pottery similar to the ceramic originally found in the Guanacaste region, but not related to the ceramic of the Chorotega or the Nicarao indigenous groups. Later pottery studies from the Ometepe and Solentiname Islands and Guanacaste region, which dates back before the arrival of the Chorotega and Nicarao groups, also show strong affinities (Guerrero and Solís 1997:43-44; Healy 1980:213; Incer 1989:46,89). This evidence suggests that the same pottery-producing culture group, the Corobicí or their ancestors, may have originally settled this area. With the arrival of the Chorotega around 800 AD and Nicarao around 1200 AD from Mexico, the Corobicí population was decimated and displaced from their territories, causing its fragmentation in small dispersed communities as those found by the Spaniards on Guanacaste in the 16th century (Stone 1977:78; Torquemada 1969:331-333).

Walter Lehmann used two basic facts to establish the connection between the Corobicí of Guanacaste and Solentiname islands with the Maleku of the Río Frío. Firstly, while doing fieldwork in the Solentiname islands in 1909, he recorded three plant names, which he believed were Guatuso words (Lehmann 1943:81). Secondly, in 1783 Estebán Lorenzo de Tristán, Bishop of Nicaragua and Costa Rica (1777-1783) organized an expedition to the Río Frío area to "civilize" the Maleku. In this expedition, Indians from the Solentiname Islands were used as interpreters. Based on these two facts, Lehmann concluded that the Corobicí of the Solentiname islands and the Guanacaste region and the present-day Maleku were culturally the same (Lehmann 1920:375-379; 1942:582-583; 1943:80-81).

The idea of the Maleku being the descendants of the Corobicí is questionable for five different reasons:

1) The plant words collected by Walter Lehmann on the Solentiname islands were not Maleku but Rama words (Constenla 1994:198; Conzemius 1930:104). Thus, Rama and not the Maleku language was spoken in the Solentiname and Ometepe Islands.

2) Walter Lehmann assumed that the interpreters from the Solentiname Islands, who accompanied Bishop Esteban Lorenzo de Tristán to the Río Frío region in 1783, and the Maleku spoke the same language. The reality is that these interpreters did not talk or communicate with the Maleku during this expedition. Thus, it is likely that these two indigenous peoples simply spoke different languages, Rama and Maleku.

3) The Maleku oral tradition does not include any historical or important event that occurred in the Guanacaste region, where the Corobicí lived according to the first Spanish explorers in the 16th century (Constenla 1994:198).

4) Some geographic names from the Corobicí territory located on the Guanacaste region recorded on early historical sources end on si or ci, an element that may be the Rama word si, which means water. Some of these geographic names include *bagaci* (town), orosi (volcano), *poasi* (volcano), *pocosi* (island), *zapanci* (river), *cotosi* (town), and *corobici* (chief, river) (Conzemius 1930:103). The Maleku word for water is *ti*.

5) Finally, in 1909 Carlos Alvarez Hidalgo, a Costa Rican policeman, collected a list of words from a group of Indians living on the Upala region, alongside the Zapote, Guacalito, and Pizote Rivers (Figure 5.3). Edward Conzemius analyzed this vocabulary and found out that the indigenous peoples of the Upala region spoke the Rama language (Conzemius 1930:104). Based on this linguistic evidence, Conzemius concluded that the Rama Indians of the Upala region and not the Maleku were the descendants of the Corobicí, who escaped from the Guanacaste area around 1569.

The presence of Rama settlements in the Upala region is mentioned in various historical sources. In 1885 José Manuel Figueroa found some houses along the Zapote River inhabited by Indians who spoke the language of the ancient inhabitants of the Solentiname Islands (Figueroa 1885:27-28). Moisés Rodríguez, a member of the Costa Rican Commission to demarcate the boundary lines with Nicaragua, also encountered Indian settlements on both sides of the Zapote River in 1892 (Montero 1892:29). Bishop Monestel of Alajuela, Costa Rica, who visited the Upala region in 1923, also reported Indian houses on the Zapote, Guacalito, and Pizote Rivers (Céspedes 1923:90-91). Finally, in 1932 Miguel Obregón mentioned that in a place known as la Cucaracha, located three of four kilometers up the mouth of the Zapote River, lived between 75 and 100 "civilized" Indians (Obregón 1932:284-285). Unfortunately, this was the last written reference on the Upala Rama, and their final fate is still unknown.

5.3 The Voto as the Forefathers of the Maleku

The third hypothesis suggests that the Maleku are the descendants of the Voto indigenous peoples. By the time the Spaniards arrived the Voto inhabited the Pocosol, San Carlos and Sarapiquí river watersheds, extending from the San Juan river to the northern slopes of the Central Volcanic Cordillera (Figure 5.1). Their name is preserved today in *Volcán de los Votos*, or Poás volcano (Fernández 1913:4,221; Ibarra 1990:37; Lothrop 1926:16; Sandoval 1976:153-154; Vázquez de Coronado 1976:87; 1883:765-768). Their total population at the time of contact is unknown, however, around 1620 Diego de Mercado reported 1000 Voto people, while in 1662 Rodrigo Arias Maldonado informed that two

hundred Voto families lived throughout this region (Arias Maldonado 1881:294; 1976:45; De Mercado 1887; Thiel 1902:19).

Similar to what happened to the Corobicí, the Voto "disappeared" from the historical records after the mid-seventeenth century. Two different hypotheses have been suggested to explain their final fate. Bernardo Thiel (1902), Carlos Gagini (1917), and Alexander von Frantzius (1895; 1925) suggested that the Voto, intimidated by the Spanish relocation (reducciones) of their settlements outside their territory, migrated westward and took refuge on the headwaters of the Río Frío, where there are the present-day Maleku. These scholars concluded that the Maleku and the Voto were the same people because the historical documents, at least until 1666 referred to the indigenous peoples living in this region using the name Voto, and only later calling them "Guatuso" (Maleku). For example, Bernardo Thiel put the Voto and the Guatuso together in his population estimates of 1700, while in his 1804 population estimates used only the name Guatuso (Thiel 1902).

More recently Alvaro Porras (1959) in his research about the Guatuso language stated that some of the indigenous burials excavated on the northern slopes of the Poás Volcano (historically occupied by the Voto) showed many similarities with burial patterns of the Maleku. He also added that several objects and artifacts excavated (probably by huaqueros) resembled the objects found nearby the Pataste River, a tributary of the Río Frío (Porras 1959:8). Unfortunately, he did not give any details about the location of such archaeological sites or the artifacts found on these two different places inhabited by the Voto and the Maleku.

The local oral tradition and historical evidence refute the idea of the Voto being the Maleku's ancestors. According to oral tradition the Voto, known as *Póto* in the Maleku language, are not considered as part of their people, but as a different indigenous group, who once lived in the San Carlos river watershed. The Voto are described as people abnormally short, of ludicrous character, with a polyandry system, in which each woman lived with two men, and the exotic tradition of building houses on trees (Constenla 1975:6; 1994:199; Porras 1959:7). In addition, at the time of the conquest, the Voto had a woman "cacica" or chieftainess, and were skillful in the construction and navigation of river cances (Fernández

Guardia 1913:221; Peralta 1883:401; 1883:765-768; Vázquez de Coronado 1976:86-88). On the contrary, the Maleku have been a monogamous society, in which women do not hold authority positions, and have shown poor skills and abilities in building and navigating river canoes. They actually did not use canoes in the past, instead they built simple "balsas" (rafts), which are arduous and hazardous to maneuver up and down the stream currents.

William Gabb (1883:307), Adolfo Constenla (1994:199), Linda Newson (1987:36), and Gregorio Smutko (1985:82) support a different hypothesis that the Voto became Rama Indians of Nicaragua. At conquest, the Rama occupied the lands extending from the San Juan River to the Bluefields Lagoon (including the Escondido River) and from the Lake Nicaragua to the Caribbean Sea (Craig 1988:42; Incer 1989:189; Sánchez 1994:90) (Figure 5.3). The name Rama did not appear in the colonial documents until the 18th century, and before that they were called "Caribes" or named after the river they inhabited (Melchora, for example).

Two important historical accounts support the idea of the Voto continuing as the Rama in Nicaragua. In his expedition of 1521, Gonzalo Ronquillo encountered Voto peoples living on the Sarapiquí River and on the northern part of the San Juan River, in present-day Nicaragua (Ronquillo 1976:332-333). This account coincides with another colonial document from 1742 reporting that in Punta Gorda, Nicaraguans besides Englishmen mixed with Miskitos, there was also a nearby population of "Caribe Indios" of the nation named "los Votos" (Rivera 1898:125). The Rama moved away from the San Juan River and established themselves to the north, between the Punta Gorda and Monkey Point in the eighteenth century, following hostilities with the Spaniards, English pirates, and the Miskito. The Voto from the San Carlos and Sarapiquí rivers and other Voto already settled there mixed together (Ayon 1977:210).

The vanishing of the Voto people and their language by the mid-18th century seriously diminishes the possibility of identifying their cultural connections with the Maleku. The oral tradition and scarce historical information disagree with this connection.

5.4 The Maleku as a Mixture of Different Indigenous Groups

The fourth hypothesis considers the Maleku as a hybrid culture, an outcome of the miscegenation of different indigenous peoples during the colonial period. Members of different indigenous groups, looking to escape from the Spanish colonial regime of exploitation, fled to the isolated, hot, and humid Río Frío River region, which led to intermarriage between neighboring peoples, and to the emergence of a new cultural group: the Maleku. Doris Stone (1977:79,161) and William Gabb (1883:305-306) argued that the intermixing occurred primarily between the Corobicí and the Voto indigenous peoples. In addition to the Corobicí and the Voto, other authors such as Norberto Castro (1970:49), Henri Pittier (1897:4), and Bernardo Thiel (1902:11,24,37) also added Huetar members to the cultural intermixing equation that gave birth to the present-day Maleku. These authors, however, did not present any proof to support the case and neglected the analysis of historical, oral tradition, linguistic, and genetic evidence.

5.5 The Maleku as an Independent Indigenous Group

Oral tradition, linguistic, genetic, and archaeological evidence show the Maleku as an independent indigenous group, who has lived in the Río Frío watershed for thousands of years without major genetic or linguistic disruptions. The oral tradition tends to support their long cultural development in the Río Frío Basin. The creation of animals, plants, and the Maleku themselves took place on the headwaters of the Río Frío's tributaries such as Buenavista, Cote, Venado, Cucaracha, La Muerte, Pataste, and Caño Ciego, located on the northern slopes of the Guanacaste Cordillera. The oral narrative does not mention a single event occurring in the Guanacaste Province (home of the Corobicí), the Central Valley (homeland of the Huetar), nor does it claim the Voto of San Carlos and Sarapiqui rivers as their ancestors (Constenla 1975:6; 1983:103; 1994:198).

Linguistic evidence shows Maleku to be a Chibchan language derived from a common Central American proto-Chibcha stock, which split around 4,000 BC. The languages derived from this Proto-Chibcha language are divided in two groups: (1) the isthmian languages: Pech (Paya), Rama, Maleku (Guatuso), Huetar (extinct), Cabécar,

Bribri, Térraba-Teribe, Boruca, Movere-Ngobe, Bokotá, Dorasque (extinct), Chánguena, Kuna and; (2) the "Magdalénico" group located east of the Magdalena River in Colombia and Venezuela, including: Antioqueño (catio-nutabe, extinct), Chimila, Cogui, Damana, Ica, Bari, Tunebo and the extinct Tairona, Duit, Muisca and Atánquez (Constenla 1995b:41-44; 1991:45) (Figure 5.4).

Using glottochronology and lexico-statistical dating, Adolfo Constenla (1991; 1995b) postulates that the beginning of the fragmentation of the Chibchan stock would have happened around the 4000 BC. For example, the Guatuso or Maleku language separated from the modern Pech language of Honduras around 4,300 BC and from the Rama of Nicaragua about 2,800 BC. In addition, the Guatuso language split from other Costa Rican indigenous languages such as the Bribri about 2,600 BC; Cabécar 2,700 BC; Boruca 3,300 BC; and Teribe around 4,100 BC (Constenla 1991:45). The fragmentation of the proto-Chibcha language around 6,000 years ago seems to coincide with the introduction or local development of agriculture that may have been the cultural determinant that triggered such change (Constenla 1991:31; 1995b:18; Corrales 2000:1).

The territory extending from the southern Caribbean coast of Nicaragua to western Panama is considered as the original territory of the proto-Chibcha speakers. This region presents the highest degree of diversity and geographically overlapping of linguistic traits. From there, migrations north and south gave rise to the Pech language in Honduras and the Chibchan languages of Colombia (Constenla 1995b:43,45). This implies that the Maleku people, who occupy the northern part of Costa Rica, are located in the original core of the Chibchan language family.

Constenla proposes that the peoples speaking languages of those families, including the Maleku would have been in the areas where the Spaniards found them in the sixteenth century. However, there is evidence against this assertion because many indigenous groups such as the Kuna, Teribe or Térraba, Guaymí, Huetar, and Rama no longer live in their 16th century lands. He also argued that there is not evidence of large migratory movements of foreign groups that would have resulted in linguistic disruptions, with the exceptions of

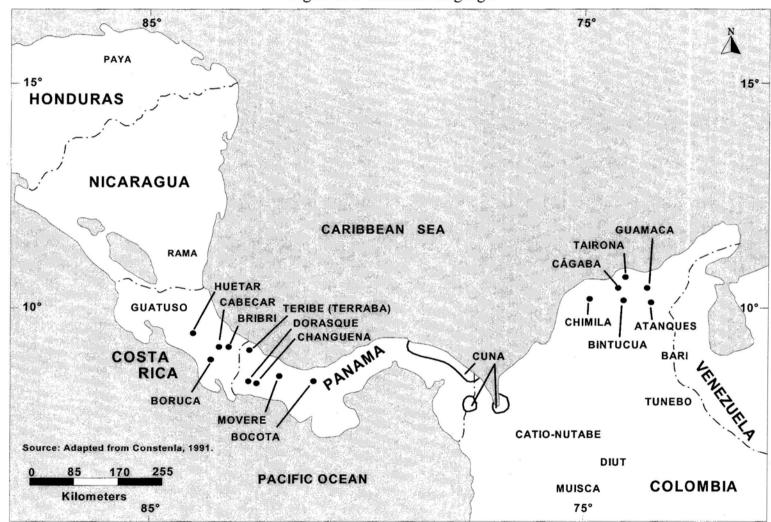


Figure 5.4. Chibchan Languages

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Mangues and Nahuas that reached the Pacific coast of Nicaragua and northwest of Costa Rica in about the 9^{th} century (Constenla 1991:11,45).

The genetic studies of modern Chibchan indigenous groups of Nicaragua (Rama), Costa Rica (Guatuso, Boruca, Bribri, Cabécar, Térraba, Huetar), and Panama (Ngobe, Bokotá, Kuna) show that they are distinct from other indigenous groups in Mesoamerica and South America based on particular characteristics of their genetic structure (Barrantes et al 1990; Barrantes 1993; 1998; Batista 1998; Barrantes and Smouse 1990). The genetic results coincide with the linguistic evidence in that the indigenous peoples of Panama and Costa Rica have been evolving from a common ancestor for the last 5,000-8,000 BC with little outside infiltration, and that there is a strong correlation between their pre-Columbian geographical territory and the regions that they still occupied today (Barrantes 1993:48-49,170-171,175-176; 1998:8; Barrantes et al 1990:64; Batista 1998:23).

Archaeology has yet to provide specific evidence to determine if the Maleku or their ancestors have inhabited the Río Frío region since pre-Columbian times. However, new archaeological data tends to support an in situ evolutionary history of some the indigenous peoples of southern Central America, including the Maleku. Archaeological research in the Turrialba Valley in Caribbean Costa Rica (Snarkis 1978), in the Arenal Basin in the Tilarán Cordillera (Sheets 1994; Hoopes 1994), and in Central Panamá (Cooke 1984; 1986; Ranere and Cooke 1996) define long spans of continuous occupation from 8,000 to 10,000 BC (the Paleo-Indian period) until the 16th century. The analysis of ceramic and lithic artifacts shows the relative absence of dramatic changes in material culture complexes (Sheets 1992). There is no indication or evidence of large migratory movements to southern Central America during this period (Cooke 1986:82; 1997:159). In addition, the archaeological data also indicate that after 5000 BC began the process of domestication of plants with the subsequent population increase and sedentarism. As a result, the territory was divided into "cultural blocks," within which each ethnic group began to build its own cultural identity (Fonseca and Cooke 1994:230).

In conclusion, the oral tradition, linguistic, genetic, and archaeological evidence tends to support the hypothesis that the Maleku is a distinct, independent indigenous group, that have lived in the Río Frío region since at least 4,000 BC without major genetic and cultural disruptions. Therefore, the hypotheses considering the Maleku as the mix of different indigenous groups that migrated into the Río Frío area during the colonial period lack proof.

6. The Colonial Period: How the Maleku Culture and Territory Remained Intact

The Maleku along with the Bribri and Cabécar are the only indigenous groups in Costa Rica that were never conquered by the Spaniards during colonial times. For most of the colonial period Spanish conquistadors were not aware of the Maleku's presence in the Río Frío watershed. However, once they knew about their existence in the 1750s, they launched several expeditions to find and subjugate them. Despite the attempts to bring them under domination, the Maleku were able to remain unconquered throughout the rest of the colonial period. This chapter explores the events leading to the discovery of the Maleku, then it describes the Spanish expeditions to subdue them, explaining Maleku's survival during conquest and colonial times.

6.1 The Discovery and Conquest Expeditions

Some authors argue that the first historical reference about the Maleku appeared in 1719 in a report to the King of Spain by the Diego de la Haya Fernández, governor of Costa Rica. According to this report the Maleku were described as the "Indian Warriors of the Río Frío" (Bransford 1882:677; Guevara and Chacón 1992:100; Squier 1858:407). A careful reading of this account shows that it does not refer to the indigenous people of the Río Frío (De la Haya 1976:381-396).

The earliest mention of the Río Frío appeared in 1745 on a report written by Joseph Lacayo about the Lake Nicaragua and the San Juan River, but no reference to indigenous peoples living in the watershed was mentioned. The territory extending from the Río Frío to the Sapoá River and from the Lake Nicaragua to the Guanacaste Cordillera was described as swampy lowland, covered with impenetrable forests, and traversed by many streams and rivers (Figure 5.2). Lacayo's narrative also added that the secrets kept by this region were totally ignored since it had not been explored and navigated yet (Lacayo 1976:421-422).

Not until the 1750s did the secrecy of the Maleku's home in the Río Frío Basin become unveiled. Two events were responsible for their discovery. Firstly, Father José A. Zepeda, a Franciscan missionary of Guatemala, claimed to have lived among indigenous peoples of the watershed for several months around 1750¹. He professed to have followed the entire chain of the volcanic mountains of the Tilarán and Guanacaste cordilleras, from which flow large rivers into Lake Nicaragua, forming fertile broad alluvial plains. Here, Father Zepeda found more than five hundred houses of indigenous peoples, who received him kindly and with whom he spent several months. In his diary, Father Zepeda mentions that during the rainy season the local peoples built houses in the trees, where they lived safe from the danger of floods. He also mentions to have seen blond and white indigenous peoples (Bancroft 1875:755; De Paula Soto 1976a:297; García Peláez 1852:143; Sanabria 1992:21).

The second event of the decade was when the residents of Esparza, Bagaces, and Cañas complained about the disappearance of cows, oxen, and horses from haciendas. The tracks of the stolen animals were traced in the direction of the mountains known as "Montañas de la Guatusa," located to the northwest of Esparza (De la Fuente 1938:546; De Paula Soto 1976a:297; Martínez y Castro 1976:273-274). Residents of these towns assumed that the marauding indigenous were the same peoples visited by Father Zepeda (Figure 5.2).

Father José Miguel Martínez, guardian of the Convent of San Francisco of Esparza, communicated to the Costa Rican province's authorities at Cartago about Father Zepeda's intriguing discovery and mysterious disappearance of cattle. The colonial authorities decided to entrust the responsibility of finding such indigenous peoples to the Catholic Church, which received logistic and military support from the colonial administration. From 1756 to 1783, the Catholic Church organized several expeditions to find and conquer such indigenous peoples.

In 1756, Fathers José Miguel Martínez and José de Castro accompanied by 13 soldiers explored the Guatusa Mountains. About 15 kilometers northwest of Esparza, in these uplands, they found dispersed Indian houses whose inhabitants left as they approached them. In some houses were cow bones and hides, and ox horns that had been stolen from nearby haciendas (Martínez and Castro1976:270-273). The same year, Matías de Sandoval y Felipe Flores, residents of Esparza explored the Guatusa Mountains, finding metates, maize and plantain fields, lemon and achiote trees, and other edible products. On their way back to

Esparza, they encountered six Indians; four of them were Huetar from the Central Valley and two Boruca from the Southern Pacific region. They claimed to have relatives living on those mountains (Martínez and Castro 1976:274-276). These two expeditions, Martínez and Castro and Sandoval and Flores were important for three reasons. Firstly, they provided for the first time clear evidence of the presence of indigenous peoples living in these mountainous parts of the country. Contact with the Huetar and Boruca suggested that the Guatusa Mountains served as a refuge area for indigenous peoples escaping from the Spanish control. Secondly, from then on the name "Guatuso" was used to designate all the indigenous peoples living on the Guatusa Mountains, and the territory extending northward to Lake Nicaragua, including the Río Frío watershed. Some people believed the Spaniards named them Guatuso because they had reddish brown hair color that resembles the red fur of the animal called guatusa or agouti (Belt 1911:33; Froebel 1993:61; Gagini 1917:80). Thirdly, the material evidence produced by these expeditions suggested that the peoples inhabiting the Guatusa Mountains were not Maleku. It is hard to believe the Maleku were responsible for the stealing of cattle since their religion forbidden them to eat meat of wild or introduced domestic animals with horns such as deer and cow. Even until the 1960s the Maleku, particularly elders still restrained from eating cow's beef, and were very resistant to work with cattle (Betancourt and Constenla 1981:20).

In 1761 four more indigenous women described as "zambas" were found in the Guatusa Mountains who were fairly knowledgeable of Spanish language and of the Catholic doctrine, which they said had been taught to them by Father Clemente Adán (De la Fuente 1938:545; De Paula Soto 1976a:298; García Peláez 1852:143; Martínez and Castro 1976:270-279). Father Clemente Adán² was a hacienda owner's son from the southern slopes of the Tenorio Volcano, Guanacaste. He attended Catholic Seminary at León, Nicaragua where he was ordained as a priest. However, for personal differences with the Bishop of León, Father Mateo de Navia y Bolaños y Moscoso (1757-1762), he returned to Costa Rica to live with his parents at the Tenorio hacienda. Gloomy and sad for an altercation he had with the Bishop of León, Clemente Adán decided to cross the Guanacaste Cordillera in 1758. Apparently, he ended living and dying among some indigenous peoples of the alluvial lowlands located to the north of the Tenorio Volcano (De Paula Soto 1976a:298; García Peláez 1852:160; Sanabria 1992:21). Using the four

indigenous women or "zambas" as guides, Father Francisco de Alvarado of Esparza, and missionary Father Pedro Zamacois, president of the missions of Talamanca, organized another expedition to the Guatusa Mountains in 1761. Four residents of Esparza and six Huetar Indians from the town of Garabito also participated in the expedition. They reached the habitations of the four indigenous women and found pieces of furniture and guitars. For eleven day the four women had the party walking in circles, without showing the trails leading to the Indian settlements visited by Fathers José Zepeda and Clemente Adán (Carmona 1897:139; De la Fuente 1938:545; De Paula Soto 1976a:298; García Peláez 1852:143; Prado 1925:161).

The unsuccessful efforts to find the Maleku on the Guatusa Mountains encouraged people to try other routes to get to them. In 1778 Father Tomás López, a priest from San Francisco de Térraba, a mission town in southern Costa Rica, traveled from Esparza to the Indian villages of Tortuga and Orosí, located on the southern shore of Lake Nicaragua (Figure 6.1). The Indians inhabiting these towns were probably Rama, who had been Christianized and spoke the Spanish language. The residents of Orosí and Tortuga told Father Tomás López that in the headwater of the Río Frío lived the Guatuso Indians, and that they usually had good relationships with them, but recently had had serious confrontations in which five of their people were killed by the Maleku. Since then, they were afraid of visiting or talking to them because they were numerous and fierce warriors (De la Fuente 1938:546; De Paula Soto1976a: 298; García Peláez 1852:144; Prado 1925:161; Thiel 1983:82).

Once Father Tomás López knew about the location of the Guatuso settlements, he persuaded seven indigenous guides and boatmen from Orosí, Tortuga, and Ometepe Islands to accompany him in an expedition to the Río Frío. They traveled from the Ometepe Island to the San Carlos Fort of Nicaragua, and from there, navigated up the Río Frío for five days. However, at the sight of the first rafts used by the Maleku for fishing, Father Tomás López's companions got scared and refused to go any further. Instead, the boatmen turned and paddled their best down-stream to the San Carlos Fort, ending suddenly this adventure (De la Fuente 1938:547; García Peláez 1852:144; De Paula Soto 1976a:299; Prado 1925:162; Quijano 1939:402; Sanabria 1992:22).

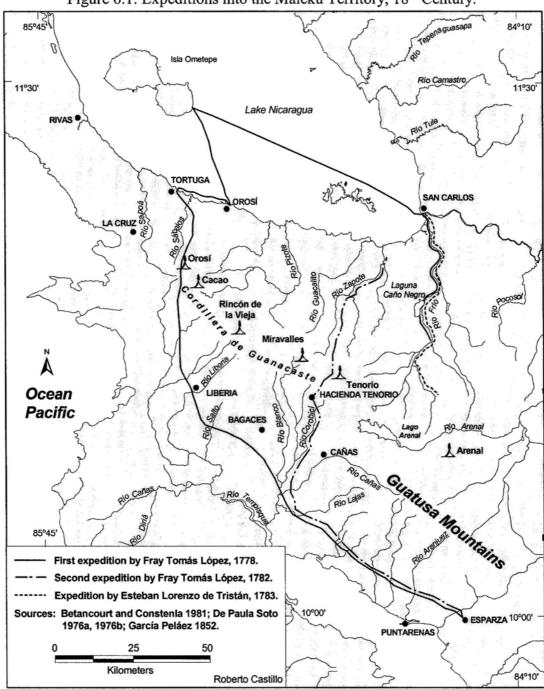


Figure 6.1. Expeditions into the Maleku Territory, 18th Century.

In 1782, four more expeditions were unsuccessful in contacting the Maleku³. Among them the most important was the second attempt made by Father Tomás López to reach the Maleku communities through the Tenorio Volcano, which he believed was the route used by Father Clemente Adán to get to these indigenous peoples (Figure 6.1). After 75 days of hardships and wandering around the alluvial lowlands of the Zapote River, they were unable to find the Maleku (De la Fuente 1938:547; De Paula Soto 1976a:299-300; García Peláez 1852:145; Prado 1925:162).

The last expedition to conquer the Guatuso was undertaken by Estebán Lorenzo de Tristán⁴, Bishop of Nicaragua and Costa Rica in 1783. While visiting Fort San Carlos, he decided to go up the Río Frío and personally bring "civilization" to the Maleku (Figure 6.1). The persistent Father Tomás López, Comandante Pedro Brizzio of Fort San Carlos, three indigenous interpreters from the Solentiname Islands (who supposedly understood the Maleku language) and several other people accompanied him. After eleven days of navigating up the Río Frío, they found a large lagoon on the right side of the river, which was named San Matías by Bishop Tristán (now is known as Laguna Caño Negro). The party found many temporary huts, rafts, and trails along the shores of this lagoon and the Río Frío used by the indigenous peoples for fishing and hunting activities during the dry season months from February to April (February to April) (Betancourt and Constenla 1981:28-29; De Paula Soto 1976b:291-293).

On the fourteenth day, they reached Río de Los Monos (La Muerte today), one of the main tributaries of the Río Frío, and found a wide and heavily transited trail where they saw three tall, white, naked indigenous men. The interpreters from Solentiname Islands talked to them, but they did not understand them and they fled into the forest. After this incident, Father Tomás López suggested to Bishop Tristán that few persons would cause less alarm than a large party, and would have a better chance to establish communication with local peoples. Bishop Tristán sent forward a small boat with Father Tomás López and the three interpreters. After navigating up the Río La Muerte for one day, the party suddenly received a furious discharge of arrows and spears from the Maleku. One of the interpreters was wounded, and the rest of the men jumped overboard or dropped into the bottom of the boat. Father Tomás López instructed his companions to escape down river, and leave him alone. Then, with a crucifix in hand he presented himself to the Maleku, who suspended their attack, entered his boat and escorted him to their village (Betancourt and Constenla 1981:29-30; De Paula Soto 1976b:291-293; García Peláez 1852:146).

After this encounter with the Maleku, nobody heard again from Father Tomás López. The group's oral tradition still preserve memories about a priest being captured in the Río La Muerte and being killed by their ancestors. Bishop Estéban Lorenzo de Tristán returned to the Fort of San Carlos unable to fulfill his goal of bringing "civilization" to the Guatuso peoples. After the tragic 1783 expedition, which apparently was the first contact of these indigenous peoples with Hispanic peoples, no further efforts occurred during the colonial period to reach the Maleku.

In conclusion, the discovery of the Maleku was really a fortuitous event. At least until 1778, the Spaniards lived in ignorance of their presence in the Río Frío watershed. If not for the stubborn persistence of Father Tomás López, the Maleku would have remained unknown for a much longer time. The purpose of the expeditions organized in the second half of the 18th century was to find the indigenous peoples among which Father José Zepeda and Father Clemente Adán visited or lived. Unfortunately for the Maleku, one of these expeditions led to its discovery in 1778, despite that these two priests did not visit or live among this group for three reasons. Firstly, the Maleku attacked the expedition of 1783 led by Bishop Tristán and killed Father Tomás López, which suggests that they had not been contacted and indoctrinated by these two priests. Secondly, the Maleku's oral tradition does not keep references about the missionary work of these priests or about peaceful contacts with outsiders before the expedition of Bishop Bernardo Thiel in 1882. Thirdly, the native religion does not present visible Christian elements (Betancourt and Constenla 1981:21). Fathers Zepeda and Adán probably lived among the Rama, who inhabited dispersed huts in the Upala region along the Pizote, Guacalito, and Zapote Rivers. There are not traces of these indigenous peoples today. It is possible that these two priests had also visited the indigenous peoples living in the Guatusa Mountains, whose houses were observed by explorers in 1756 and 1761.

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6.2 Survival of the Maleku

The Maleku represent an excellent example of a Central America indigenous group, who maintained its culture and territory throughout the conquest and colonial periods. This survival depended on the interrelation of five different factors.

1) The local physical geography of the Río Frío watershed dominated by hot, humid, and rainy climate, covered with dense tropical rain forest and swampy-marshy lowlands, subjected to flooding, and infested with insects, diseases, and dangerous wild animals, did not attract the Spanish attention. In addition, the rugged topography of the Guanacaste and Tilarán cordilleras to the south and the swampy-marshy areas to the north made this region not easily accessible to the Spanish conquerors. As a result of these geographic factors, Río Frío watershed was an isolated and remote area where the Maleku's culture patterns continued with considerable protection from direct outside impact.

2) The Maleku occupied a location peripheral to Spanish permanent settlement. The native communities located relatively far from the Spanish population centers in Costa Rica's central valley and the Guanacaste region, and from the military forts of San Carlos and El Castillo on the San Juan River, allowed them to avoid Spanish contacts, pirate attacks, and Miskito raids during the 17th and 18th centuries⁵. The Spaniards in the Nicaraguan province concentrated more in securing the strategic commercial San Juan-Lake Nicaragua waterway than in establishing permanent colonies in the region. This situation indeed contributed to the Maleku's isolation and the reduction of outside contacts.

3) The Spanish ignorance of the Maleku's presence in the Río Frío and their late discovery in the colonial period permitted them to avoid outside contact and domination. In this way, they escaped some of the devastating effects of deadly introduced diseases, Spanish genocide, and ethnocide actions that led to the extinction of other native groups in Costa Rica.

4) The Maleku's armed resistance was successful in keeping soldiers and missionaries away from their lands. Their violent reaction against the 1783-expedition proved their hostility

toward outsiders. It was this bellicose and aggressive character that helped them to retard any permanent contact and acculturation until the 19th century.

5) Finally, the absence of any known precious mineral deposits such gold, silver, or cooper kept the mining activity and its disastrous consequences on indigenous communities away from the Río Frío area. In addition, the general idea that the Río Frío area was only lightly settled by indigenous peoples made it little attractive to the Spaniards. The Spaniards preferred to settle on high dense indigenous populated areas such as the Central Valley and Guanacaste, to profit from the exploitation of the local labor force.

The interrelation of these five factors helps to explain the survival of the Maleku indigenous peoples of the Río Frío during the colonial period. It is a remarkable fact that after the 1783-encounter and until the end of the colonial period (1821), no more expeditions were organized to conquer the Maleku, contributing to their survival today. As a result, they were able to maintain their culture and lands for the rest of the colonial period, and to remain as little known as they were at the periods of the discovery and conquest, 350 years ago.

¹ Father José A. Zepeda was the guardian of the Convent San Francisco of Esparza in 1750. Apparently, Father Zepeda kept a diary of his missionary experiences. The first news of the diary of Father José A. Zepeda appeared on the publication "Memorias para la Historia del Antiguo Reyno de Guatemala," published in 1858. A small portion of his original diary's data on the indigenous peoples he visited in 1750 was included in this publication. The location of Zepeda's original diary is unknown.

² The story of Father Clemente Adán served a source of inspiration to Father Juan Garita, who wrote a novel entitled "Clemente Adán, Leyenda Nacional," published in 1901. This novel narrates the life of Clemente Adán from his childhood until his ordainment as a priest, ecclesiastical labor, and death among the Guatuso.

³ Father José Cabrera explored the Poás Volcano and the territory located east of this volcano. José Mejía of Heredia and Paulino Pórras of Poás organized also separate searching explorations to the territory located east and north of this volcano, without success.

⁴ Estéban Lorenzo de Tristán served as Bishop of Nicaragua and Costa Rica from March 1777 to September 1783. He founded the Hospital San Juan de Dios and the first primary school in Cartago, and contributed to the establishment of the city of Alajuela. The original diary of the expedition of Bishop Tristán was located at the Library of the Sociedad Económica de Amigos de Guatemala. Costa Rican historian, León Fernández Bonilla, reported that the original manuscript had disappeared from this library years later. There is only one copy of the original diary available at the Biblioteca Nacional de Madrid. León Fernández published a partial transcription of Tristán's original diary in the Colección de Documentos para Historia de Costa Rica in 1976. In addition, Helia Betancourt and Adolfo Constenla reproduced Bishop Tristán's diary in 1981.

⁵ The San Juan River-Lake Nicaragua waterway was the only direct route from western Nicaragua to Spain and the Spanish Caribbean colonies. The strategic control of this route by the Spaniards fueled several attacks by British pirates and Miskito raiders in 1573, 1665, 1670, 1689, and 1780. Thus the Spaniards began to construct fortifications on the San Juan River to protect their shipments of indigo, cochineal, and precious metals against the increasing attacks of European pirates and their allies, the Miskitos. By 1727 the San Juan River had twelve military stations along its banks, with Castillo de la Inmaculada Concepción and Fort San Carlos the strongest positions (Girot and Nietschmann 1992:55; Peary 1889:316; Radell 1970:110, 123).

7. Early Republican Period 1820s-1860s: The Mysterious White Indians of the Río Frío

For the first three decades of independence and republican life in Costa Rica the Maleku remained relatively undisturbed. After 1849, however, new incursions made into the Río Frío led to unfortunate encounters with the native population. The increasing presence of national and international agents in the region was the result of the enormous attention given to the San Juan River-Lake Nicaragua waterway as one of the most suitable locations for building an interoceanic canal. The geopolitical and economic benefits of the future canal also brought border disputes between Nicaragua and Costa Rica, colonization and road construction projects, operation of a passenger transit company, and a war against a force of filibusters from the United States. The San Juan Region-Lake Nicaragua waterway also attracted many foreign travelers, who collected and spread stories and tales about the ferocity and the apparently white complexion of the Maleku indigenous peoples.

The objectives of this chapter are fourfold. Firstly, to analyze the national and international disputes and historical events that took place in the San Juan River-Lake Nicaragua waterway, including the Río Frío in the 19th century. Secondly, to evaluate their impacts on the Maleku indigenous culture and lands. Thirdly, to compile stories about the warlike character of the Maleku. Fourthly, to investigate the theories that explains the unusual white color of the Maleku.

7.1 From Independence until the 1840s

During Costa Rica's first three decades of independent life no organized attempts were made to explore the Río Frío or conquer its native inhabitants. The lack of interest in indigenous territories located outside the central valley was related to political, demographic, and economic conditions of the young republic. The early years of independence were a period of confusion and civil strife. In 1823 and again in 1835 residents of the principal towns of Cartago, San José, Alajuela, and Heredia engaged in civil wars to determine Costa Rica's new political status and the location of its capital (Wilson 1998:20). The concentration of the small Costa Rican population in the Central Valley, isolated from major markets in Europe and North America, without terrestrial transportation, discouraged both the colonization of indigenous territories and the development of settlements and commercial agriculture outside the Central Valley.

In the 1840s coffee became the most important commercial export of Costa Rica following the first direct shipments to Europe. Oxcarts transported it from the Central Valley to the port of Puntarenas on the Pacific coast. The cart road still had the disadvantage of leading to an ocean isolated from Costa Rica's major trading partners in Europe and eastern North America since coffee had to be shipped around Cape Horn, a very slow and expensive journey. For this reason, the government offered rewards in money and land to people engaged in finding convenient routes that connected the central valley with the San Juan River and the Caribbean coast (Frantzius 1895:7-8; Hall 1985:125).

The Sarapiquí, San Carlos, and Frío rivers provided an outlet to the Caribbean port of San Juan del Norte, from whence boats sailed to Kingston, Jamaica, and London. Several expeditions explored the Sarapiquí and San Carlos rivers looking for a connection¹. Of the potential routes, the Sarapiquí was considered the most suitable to get to the San Juan River because it was shorter than the others, and some people had already used it to travel to Europe (Figure 7.1). For this reason, construction of a cart road from San José to the Sarapiquí River began in 1836, but after a few kilometers its construction stopped due to financial problems (De la Cruz 1987:546-7).

The increasing commercial traffic with other countries, especially with England, and the need to communicate with the San Juan River and the Caribbean coast brought the Costa Rican attention to the northern plains. The newly discovered route to the San Carlos River was used by later expeditions to reach the Maleku's heartland.

By the end of the 1840s the geographic seclusion enjoyed by the Maleku began to vanish. The occurrence of various events in the nearby San Juan-Lake Nicaragua waterway drew a lot of attention toward the Río Frío and its native inhabitants, which led eventually to the opening of the Maleku culture and lands to the outside world. Among these events were the construction projects of an interoceanic canal, the operation of a trans-isthmian

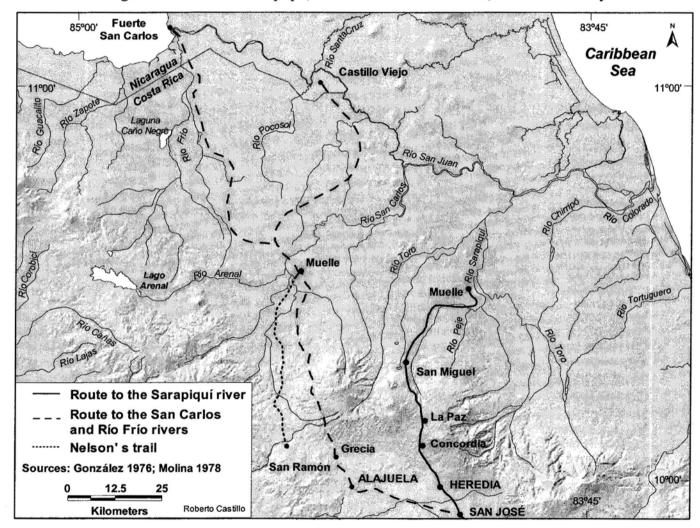


Figure 7.1. Routes to Sarapiquí, San Carlos and Frío Rivers, Mid-19th Century

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passenger company, the border disputes between Nicaragua and Costa Rica, the colonization and road construction projects, and the Filibuster War.

7.2 The Nicaraguan Canal

Three geographic features occur side by side that have for centuries encouraged dreams of an interoceanic canal in southern Nicaragua: the 800 km² freshwater Lake Nicaragua, the 20 km-wide land divide between the lake and the Pacific Ocean called Rivas Isthmus, and the 200-km-long San Juan River that connects the lake to the Caribbean Coast (Girot and Nietschmann 1992:52). Colonial proposals for building a canal across Nicaragua never advanced beyond rudimentary surveys since at that time nature's obstacles were impressive and technologies limited (De Mercado 1887:86; Gámez 1889:275; Jiménez 1889:15).

In the late 1840s both England and the United States tried to establish hegemony over the transisthmian route. The United States wanted the canal to connect her eastern states with her newly acquired Pacific territories of Oregon and California, and principally the rich gold mines found in California in 1848 (Clayton 1987:324). The economic gains of the canal included quicker access to new markets, and converting the territory along the canal into a producer of tropical fruits and hardwoods, and a source of precious metals. The future Nicaraguan canal also included geopolitical benefits. The canal was located in the geographical pivot of the American continent, and its construction would be essential for extending United States control in the Pacific Ocean, Caribbean Sea and elsewhere in the hemisphere (Brannström 1992:26-27).

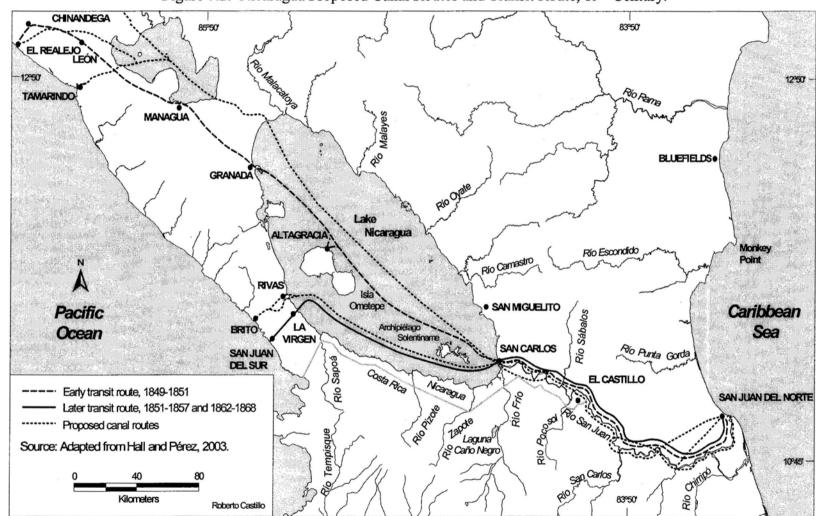
The Anglo-American rivalry for controlling a route across Nicaragua led to the signing of the Clayton-Bulwer Treaty in 1850 between both countries. This treaty basically established that neither England nor the United States would ever obtain or maintain for itself any exclusive control over the ship canal. It also declared that neither nation would occupy, fortify, colonize, or exercise any dominion over any part of Central America (Clayton 1987:325; Sibaja 1974:158-159; Woodward 1985:134). Nicaragua, and in less

degree Costa Rica, with territorial sovereignty over the proposed inter-oceanic canal routes were left out of the Clayton-Bulwer Treaty.

Several canal surveys and charters were made and granted throughout the 19th century², but no international canal proposal was ever intended to be a joint venture between Central American states (Figure 7.2). Of all the canal proposals only one got beyond the paper work: the Maritime Canal Company of Nicaragua. Between 1889 and 1893 this company spent over a million dollars in surveys, dredging plants, steamboats, storehouses, workshops, and the construction of 11 miles of railroad in San Juan del Norte. The panic of 1893 economic crisis in the United States coincided with the company's attempt to refinance the enterprise and the project collapsed (Colquhoun 1895:39-43). At the turn of the century, both Nicaragua and Panama canal routes were considered equal for their benefits and drawbacks, at least until a sudden decrease in the price offered by a French operation for the Panamanian concession. When the Panama route became cheaper, the United States government initiated a series of events leading to the long-awaited construction of an interoceanic canal in Central America³.

The failure of the Nicaraguan canal ended majestic grandiose dreams of economic development and environmental transformation for the San Juan River-Lake Nicaragua region. Despite the relative proximity to Lake Nicaragua and the San Juan River, the Maleku did not suffer any direct intervention as a result of canal related-activities during the 19th century. There is no recorded evidence that canal surveyors encountered or visited the Maleku, or explored the Río Frío, one of the main tributaries of the San Juan River. The only written source referred to a camp built in the mouth of the Río Frío by Orville Whitmore Childs in 1850-51, when he undertook a canal survey for Cornelius Vanderbilt (Childs 1852). Probably the most important impact of the Nicaraguan canal proposals was to attract the Costa Rica and Nicaragua attention toward an unimportant and marginal region, which led both countries to bitter border disputes and colonization projects.

One of the undeniable impacts of the canal proposals was a complicated era of boundary dispute between Nicaragua and Costa Rica. Nicaragua's interest in the construction of an interoceanic canal generated conflicting claims and unyielding positions



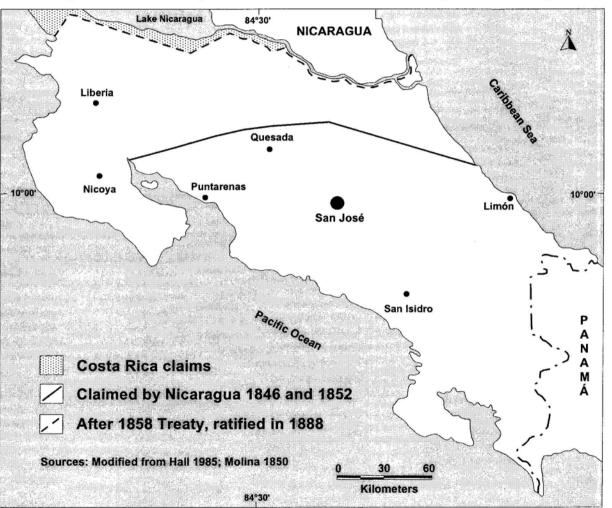


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between the two countries, nearly ending the canal construction before it began (Ireland 1941:24). Costa Rica claimed as frontier the political boundaries with Nicaragua to be La Flor River, the southern shore of the Lake Nicaragua and the whole right side course of the San Juan River (Figure 7.3). Furthermore, Costa Rica claimed an equal right with Nicaragua to navigate in the San Juan River and Lake Nicaragua, and the shared-dominion of the San Juan del Norte port on the Caribbean coast. Most of the canal proposals neglected to represent the various tributaries of the San Juan River, mainly Costa Rican, a hydrographic reality which helped to fuel Costa Rica claims to material benefits from the constructed proposed canal (Brannström 1992:44). The San Juan River watershed has 41,600 km², of which 30 percent lies in Costa Rica, and presently, about 85 percent of the San Juan's water originates in Costa Rican territory (Girot and Nietschmann 1992:53).

Nicaragua, on the other hand, claimed as her own a straight line from the mouth of the Tempisque River on the Pacific Coast to the Sarapiquí River on the northern plains and from here to the mouth of the Matina River to the northwest of Limón on the Caribbean Coast. These Nicaragua's exaggerated territorial claims would have deprived Costa Rica of Guanacaste, of most part of the northern plains, including the Maleku territory, and of a wide belt of land in the northeast of the country (Hall 1985:57-58; Pim 1863:24). In addition, Nicaragua claimed to be the only one with absolute sovereignty over Lake Nicaragua and over both sides of the San Juan River, making it the only state with free navigation rights to the San Juan and Lake Nicaragua (Molina 1850:35; Obregón 1993:91).

Throughout the last half of the 19th century, boundary disputes arose from contemporary canal surveys, and declined when prospects for the canal diminished. The two republics signed the Cañas-Jeréz Treaty in 1858, which was ratified 30 years later by President Grover Cleveland, and arbitrated by E. P. Alexander in 1897. According to this treaty, Nicaragua ceded Guanacaste to Costa Rica in exchange for a narrow strip of land along the southern shore of the Lake Nicaragua, and total sovereignty of the San Juan River from its outlet in the lake to its mouth in the Caribbean Coast. Costa Rica retained commercial navigational rights in perpetuity on the river, from its mouth up to three miles before El Castillo, but renounced all claims to sovereignty over the port of San Juan del Norte (De la Cruz 1987:381-384; Keasbey 1896:442-443; Sibaja 1974:247-251).





7.3 Colonization projects

The early republican governments, eager to occupy the entire nation's territory, signed contracts with entrepreneurs to introduce foreign immigrants and developed agricultural colonies. The prospects for an interoceanic canal in southern Nicaragua, and the boundary disputes between Costa Rica and Nicaragua encouraged the Costa Rican government to establish agricultural colonies on the strategic and disputed northern plains of the Sarapiquí, San Carlos, and Frío rivers.

The administration of José María Castro Madríz signed a contract with the Englishmen Fyler and Carmichael granting them 250,000 acres of uncultivated lands, of which 150,000 acres were located within the boundaries of the Miravalles Volcano, the Frío, San Carlos, and San Juan rivers, and Lake Nicaragua (Obregón 1984:194). This project of colonization suffered delays, so the government celebrated another colonization contract with the Argentinian Crisanto Medina to establish agricultural colonies in any place located within the Meridians 84° and 85° and the Parallels 10° and 11° (Figure 7.4). These colonization projects failed one by one due to the hot and rainy climate, the prevalence of tropical diseases, the dense natural vegetation, and the lack of communications (Hall 1985:119-120; Obregón 1993:136).

In 1880 Minor Keith, owner of the Costa Rican Railroad Company, signed a contract with Costa Rica to build a railroad to the northern part of the country. The purpose of this project was to join the Atlantic railroad with a branch that extended from Guápiles to the Nicaraguan border with objective to take advantage of the interoceanic canal. The contract provided Keith with 280,000 hectares of lands on both sides of the new railroad, of which 180,000 hectares were located in the San Carlos and Frío river valleys. In 1887 the Costa Rican Railroad Company ceded land concessions to the River Plate Trust Loan and Agency Company, an English company with the purpose of bringing foreign immigrants to colonize those areas. Fortunately, for the Maleku, none of these infrastructure and colonization projects were ever initiated due to financial problems and crisis in the London market (Quirós 1991:35-37).

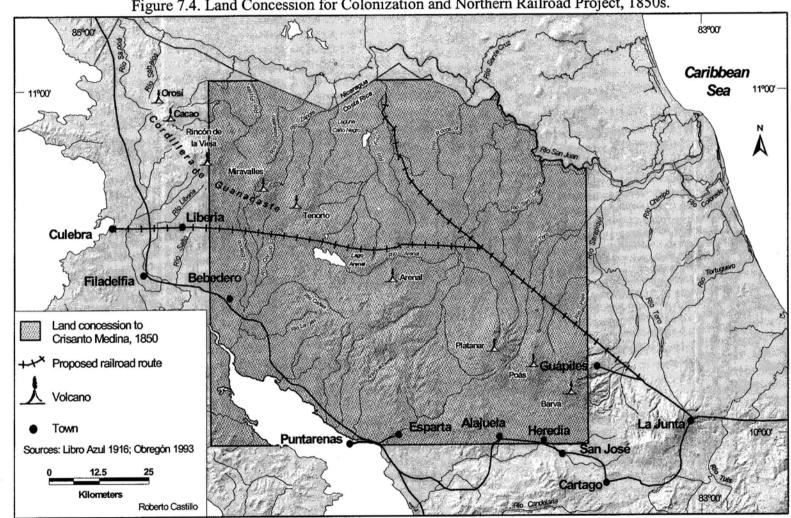


Figure 7.4. Land Concession for Colonization and Northern Railroad Project, 1850s.

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7.4 The Gold Rush and the Nicaraguan Route

The discovery of gold in California late in 1848 set thousands of United States eastern gold seekers in motion to the west in 1849. Although the early gold rushers tried numerous routes across the Central American isthmus, only two were permanently traveled - Panama and Nicaragua. In 1851 a company named Accessory Transit Company owned by Cornelius Vanderbilt began to transport passengers from the east coast of the United States to California⁴. Passengers embarked on a steamer from New York or New Orleans and landed at San Juan del Norte on the Caribbean (Figure 7.2). From there, travelers ascended the San Juan River on small steamboats and canoes or "bongos" to Lake Nicaragua and then proceeded across the lake on large steamers to Virgin Bay. From there passengers rode on horses, mules, and ox carts thirteen miles over a well-made road to the small Pacific port of San Juan del Sur (Folkman 1972:8; Obregón 1956:39; Pim 1863:226-227; Squier 1852:260-61).

Although only about 5,000 passengers had crossed Nicaragua in 1851 as opposed to near 30,000 in Panama, by the end of 1854 the year's total showed that 23,589 had selected the Nicaraguan route in comparison to 29,253 at Panama (Table 7.1). Until that year the Nicaraguan route was effectively competing with the Panama and gave every indication of passing it in popularity. However, the next year its popularity began to decline due to different threats. The first threat to its use came with the opening of a railroad across Panama in 1855. The second threat came with the war against the "North American Filibusters" in 1856-57, which brought an end to transportation in the isthmus. Seven years of contention intervened before the route resumed continuous operation in 1862. The final blow to its operation came with the opening of the United States transcontinental railroad in 1869 (Clayton 1987: 325; Folkman 1972:92,126; Sibaja 1974:198).

The operation of the Accessory Transit Company had some direct effects on the Río Frío region and its native population. The presence of thousands of travelers and the sound of the beating paddles of the steamboats on the San Juan River and Lake Nicaragua probably scared the Maleku. So, they maintained themselves on the middle sections of the Río Frío, away from the river and lake. However, some people, particularly employees of the Accessory Transit Company came up the Río Frío for hunting and fishing, and for extracting timber and collecting firewood for lake and river steamers. In addition, residents of San Carlos Fort, including Nicaraguan soldiers, established small plantain and corn plantations several miles up the Río Frío (Parker 1877:397). It was also reported that people from San Carlos used to canoe up the river as far as the plantain, cacao, cassava, and maize grounds of the Maleku, loaded their boats with these products, and brought them down to San Carlos (Belt 1911:34).

Vaar	New York-San Francisco			San Francisco-New York Number of Passengers		
Year	Number of Passeng		Total	Via Via		Total
	Panama	Nicaragua		Panama	Nicaragua	
1848	335	2	335		0	
1849	4,624		4,624	1,629		1,629
1850	11,229		11,229	7,770		7,770
1851	15,464	1,305	16,769	14,189	3,666	17,855
1852	21,263	10,851	32,120	11,845	6,552	18,397
1853	17,014	11,595	28,609	10 232	12,362	22,594
1854	18,445	13,128	31,573	10,808	10,461	21,269
1855	15,412	12,397	27,809	10,397	8,615	19,012
1856	18,090	6,092	24,182	12,245	7,270	19,515
1857	13,343	1,443	14,786	11,627	1,555	13,182
1858	20,596		20,596	8,030		8,030
1859	23,567		23,567	17,682		17,682
1860	16,257		16,257	11,213		11,213
1861	17,765		17,765	6,671		6,671
1862	17,328	562	17,890	5,959	538	6,497
1863	15,237	2,531	17,768	8,470	2,225	10,695
1864	20,643	1,145	21,788	12,671	2,125	14,796
1865	13,150	5,646	18,796	16,506	5,948	22,454
1866	22,889	5,312	28,201	12,450	7,589	20,039
1867	20,540	7,762	28,302	10,355	5,689	16,044
1868	38,680	1,713	40,393	18,243	484	18,727
1869	12,744		12,744	4,724		4,724
TOTAL	374,615	81,488	456,103	223, 716	75,079	29,8795

Table 7.1. Passengers by the Isthmian Routes 1848-1869

Source: Folkman 1972:163

Although not confirmed by written references or oral tradition, it is possible that foreign intruders might have killed local people. The Maleku were particularly vulnerable when they took care of their crop plantations located along the Río Frío banks, or when they went farther down to the Caño Negro lagoon for hunting and fishing during the dry season. It is known that several Rama, who lived on the Melchora River, a tributary of the San Juan River were shot at by passengers ascending and descending the San Juan River (Squier 1852:105). Thus, it seems possible that the same might had happened to the Maleku.

7.5 The Filibuster War 1856-1857

The Liberals of Nicaragua turned to Tennessee adventurer named William Walker for help in overthrowing the Conservatives from power in return for generous promises of land concessions. Walker equipped a mercenary force of filibusters, and easily gained control and set up a puppet government in Nicaragua. Walker took over the presidency of Nicaragua in 1856 and offered large land grants to United States citizens, made English the official language of the state, and legalized slavery. Costa Rica joined the nationalistic forces of other Central American countries in Nicaragua who opposed the establishment by Walker of a society based on slavery. An army commanded by the president of Costa Rica, Juan Rafael Mora, finally, succeeded in defeating the mercenaries on May of 1857 after a yearlong of struggles (Hall 1985:58; Pérez 1989:82; Woodward 1985:136-144).

The transit route across Nicaragua came under the control of William Walker and the filibusters. Control of the transit route, which also meant control of the entire waterway, was a strategic necessity. Nicaragua's principal means of revenue came from customs collections made at San Carlos. In addition, new recruitment and ammunitions for the filibuster troops came via this transit route. Control of this route gave William Walker a great military and economic advantage over the Central American army. For this reason, it was considered "the highway of filibusterism" (Obregón 1956:243).

By the end of 1856 the President of Costa Rica, Juan Rafael Mora, recognized that regaining control of this transisthmian route was probably the most strategic point of the war against William Walker. Thus, a national campaign began on November 1856 to get control of the San Juan River-Lake Nicaragua waterway. By January 1857, the Costa Ricans had total command of the transit route. They captured the San Carlos and El Castillo military

forts located along the San Juan River, and seized two lake steamers and five river steamers (Calvo 1909:45-46; Montero 1955:37-51; Obregón 1993:191). During the national campaign the only two routes to reach the San Juan River from the Central Valley were the Sarapiquí and the San Carlos Rivers, but both river mouths were under the filibuster control. Thus, it was necessary to find alternate route to reach the San Juan River and the military forts. Two expeditions were organized to find such a route that directly affected the Maleku indigenous peoples.

Ramón Rodríguez along with six men departed from San Ramón on April 1856. They followed the road to San Carlos River established by Francisco Martínez in 1850. From a place named Muelle, they navigated down the San Carlos River to the confluence with the Arenal River. From there, they walked north-west-north and after crossing 37 streams and 6 small rivers found thatched Maleku huts, whose inhabitants had recently fled. Inside the huts were several fireplaces, large clay pots, gourds, and other house utensils. Because they did not carry guns to defend themselves in case of an Indian attack, the intruders returned to San Ramón (Obregón 1956:107-108; Obregón 1991:198).

Colonel Pío Alvarado with nineteen soldiers led the second mission on November of 1856. They followed practically the same route used by Ramón Rodríguez and found several Maleku huts that had been recently abandoned. There were corn, cacao, plantain, stone axes, and gourds. On the Río Frío the group observed many scattered Indian habitations, and some soldiers fell down into the fall-trap ground holes disguised for capturing wild animals. Navigating down the Río Frío until it meets Lake Nicaragua and San Juan River, the party reconnoitered the Fort of San Carlos, situated on the opposite side of the San Juan River (Frantzius 1895:32-33; Obregón 1956:238-239).

The group returned back using the same route, but were attacked by approximately 80 young men, who were led by a chief wearing a headdress made of bird feathers. The others had long black hair, their faces and parts of their bodies painted with achiote, and used 1.5-meter long cane arrows with hard spear points, which severely injured some party's members. By using machetes the soldiers were able to kill some of the attackers, scaring the rest away. Afraid of a second attack the party walked day and night to return safe

(Echavarría 1966:39-40; Frantzius 1895:32-34; Gabb 1883:483; Molina 1978:92; Obregón 1956:238-240). Fortunately for the Maleku, the route crossing their territory by Pío Alvarado and his companions was never used by the Costa Rican army, probably because the Maleku stood in their way.

7.6 The White Indians of the Río Frío

Foreign travelers in Nicaragua, Costa Rica, and especially on the San Juan River in the nineteenth century, were responsible for collecting and recreating fascinating stories about the ferocity and the apparently reputable white physical complexion of the Maleku. The materials for these stories had their origins in the colonial period. For example, Father José Zepeda mentioned the presence of white individuals among the peoples he visited on the northern plains in 1750 (Bancroft 1875:755; De Paula Soto 1976a:297; García Peláez 1852:143). The hostile and aggressive attitude of the Maleku toward outsiders was tested in 1783 when they repelled the expedition led by Bishop Estéban Lorenzo de Tristán, and killed a priest named Tomás López. Participants in this expedition also claimed to have seen three tall white Indians (Betancourt and Constenla 1981:29-30; De Paula Soto 1976b:291-293; García Peláez 1852:146).

In the 19th century more unfriendly encounters and confrontations occurred between the Maleku and unwanted intruders, which contributed to reinforce their hostile character and their supposedly fair complexion. In 1849 Trinidad Salazar, commandant of the San Carlos Fort, with two large boats carrying several Nicaraguan soldiers ascended the Frío River. While camping on one of the banks of this river, the party was attacked by the Maleku, who killed several on the spot and wounded several others. The survivors, including Colonel Trinidad Salazar, severely wounded by arrows, succeeded in reaching Fort San Carlos. None of the survivors were reportedly able to see a single Maleku warrior. This particular event added more material to the superstition with which the Maleku were already regarded (Boyle 1868: 42-44; Cleveland 1868:83-85; Froebel 1978:13; Squier 1858:406-407). Another encounter, already mentioned, occurred in 1856 when a group of Costa Rican soldiers led by Colonel Pío Alvarado confronted an attack by the Maleku in the Río Frío. The native warriors were described as having the ordinary yellowish color, but there were some with light skin color, lighter than that of the rest of the Costa Rican indigenous peoples, as well as brownish or reddish hair (Frantzius 1895:34). Francis Thomas Meagher, who lived in Costa Rica from 1858 to 1860, wrote about the same unfortunate encounter, but with different results. He mentioned that the soldiers killed an Indian women warrior, described "as a beautiful woman of perfect whiteness and exquisite body shapes" (Meagher 1970:442-443).

The stories about the Maleku continued to be collected and embellished by foreign travelers. Mayor Máximo Blanco of the Costa Rican army, who had taken the control of the San Juan River away from William Walker in 1856, talked to a few surviving Rama Indians living in the Sábalos River, a tributary of the San Juan River. When asked about the Guatuso Indians by Blanco they replied that the Guatuso were white and had beards, and were afraid of them because they killed everybody who approached their residences (Boletín Oficial 1857:608). Ephraim G. Squier stated that the Maleku inhabiting the Río Frío were above the ordinary stature, with comparatively light complexions and red hair, and their women were as fair and beautiful as the fairest Europeans (Squier 1860:65; 1856:65).

Julius Froebel, who visited Central America after Squier, added that the Maleku were of fair complexion, a statement which caused the appellation of "*Indios Blancos*" or Guatusos. It has been suggested that the name given to the Guatuso people came from the general belief that they had reddish brown hair color that resembles the red fur of the small animal called guatusa or agouti (Froebel 1978:59; Gagini 1917:80).

Richard Stout, referring to the Maleku, wrote that accounts of gold, silver, and opals have been received from the unfriendly Guatuso Indians, who inhabit the Frio River, and who denied all entrance there (Stout 1859:30). Godfrey Vigne, writing in 1863, stated that according to hearsay there was a tribe of fair Indians, supposed to be descendants of Spaniards, two days boating up the Frío River (Vigne 1863:77). Thomas Belt, an English engineer, in 1872 mentioned that the upper waters of the Frío River were inhabited by a race

of Indians called Guatusos, who had red or light-colored hair and European features (Belt 1911:33).

Frederick Boyle, who traveled throughout Central America in 1866 mentions that the richest specimens of gold quartz he had ever seen, came from the Río Frío area (Boyle 1868:219-224). He also wrote the following note: "Across the San Juan River dwells that mysterious and dreaded people the Guatusos, or white Indians of the Río Frío. This strange and indomitable race occupy the north-east corner of Costa Rica, and there, surrounded by settled country, within three weeks of direct course from England, they positively keep the wealthiest district of that republic as completely closed to the world as if it were sunk beneath the Atlantic" (Boyle1868:298).

Finally, in 1868 Daniel Cleveland wrote the following: "The Frio River drains a large extent of country, which is rich and fertile and abounding in gold and other precious metals. But it is inhabited and possessed by the Guatuso, a large and powerful tribe of Indians who had never been conquered and brought under the authority of the government, and of whose wonderful prowess and terrible ferocity strange stories are stated" (Cleveland 1868:83-85).

Although the stories about the white color of the Maleku are hard to believe, there were two similar theories explaining such particular condition. The first theory stated that when Sir Francis Drake sacked and raided the town of Esparza in 1666, several of his buccaneers mutinied, expressing their desire to remain in this town. Drake retired to the Gulf of Nicoya, and left them to their fate. But when the Spanish army assembled, and the mutineers found themselves surrounded, they escaped through the forest of the Guanacaste Cordillera, intending to cut their way to the friendly Miskito Coast. Apparently, the buccaneers never appeared in the Miskito territory. Many people in Costa Rica believed that the pirates settled around the headwaters of the Frío River, destroying the Guatuso male population, and taking the women as wives. According to this legend the white Indians of the Río Frío are the descendants of these Englishmen (Boyle 1868:210; Quijano 1939:400-4001).

The second theory is very similar to the first one. The difference lies in that when Sir Francis Drake and his buccaneers sacked the town of Esparza in 1666, a number of Spanish inhabitants escaped and took refuge in the Frío River mountains, where they mixed with the Maleku indigenous peoples producing a new kind of race. According with this theory, the red or brownish hair and fair complexion of the Maleku was the result of their mixing with Spaniards and not with Englishmen (Bransford 1882:680; Gabb 1883:484).

7.7. The Opening of the Maleku Territory

These unbelievable yet fascinating stories about the Maleku and the potential riches of their territory, enticed people not only to unveil the mystery surrounding the Maleku, but to look for precious minerals and hard woods for commercial purposes. Among 19th century travelers in Central America, Frederick Boyle was the most interested in the Maleku. He tried in three different occasions to organize an expedition to the Río Frío while he was in San Juan del Norte and Virgin Bay in Nicaragua, and San José, Costa Rica. He points to volunteers unwilling to contribute to the expenses of the journey and the opposition of wealthy coffee planters for the failure of the Costa Rican expedition (Boyle 1868:236). Throughout his writings, Boyle expressed considerable interest in the Maleku, which he attributed only to scientific and ethnographic curiosity. However, his multiple references about potential gold, precious minerals, and other natural riches of the Frío river makes one wonder if other reasons drove him to explore this region.

Costa Ricans were also interested in exploring the Río Frío for precious minerals and forest resources. According to Boyle, in 1866 there was a group of residents of San José preparing an expedition to the Maleku country under the leadership of Colonel Juan Estrada. Such expedition never took place due to lack of financial sources to cover expenses of the party, the opposition of the coffee oligarchy, and what Boyle suggested as a preventive reason "hesitation and timidity of the Costa Ricans" (Boyle 1868:219-224).

The only known expedition that actually reached the Maleku settlements in 1867 was organized by Captain Parker, a former Texas Ranger and filibuster, resident of San Juan del Norte who for several years was engaged on the steamers of the Accessory Transit Company. In 1867 Captain Parker along with three Frenchmen and a German, departed from San Carlos to the headwaters of the Frío River. After four days of navigating, they saw small Indian rafts and fair quantities of plantains, cassava, papaya, maize, dasheen, and cacao. They also observed many temporary perishable huts along the Río Frío, sometimes numbering a dozen together, which were used for visiting the plantations and for fishing and hunting. The temporary huts were quickly vacated at their approach, with the Maleku making a great deal of noise in their flight. Unlike past encounters, on this occasion they inexplicably did not attack the intruders. This situation gave the party better opportunity to see closer the Maleku while they were fishing, carrying plantain in small rafts, or simply fleeing into the forest (Parker 1877:398-399).

Captain Parker provided the most complete description of the physical appearance of the Maleku until that time. He stated that the Maleku "in stature average six feet, and in weight two hundred pounds, the females likewise being of large size. They are of clear copper color, untainted, apparently, by admixture with either white or black blood, and perfect models of strength and muscular development. Their faces are somewhat broader, with higher cheek-bones than the Lake Indians, with coarse but not generally unpleasant features, whilst the long, straight black hair is allowed to fall around the body in both sexes until it sometimes trails on the ground. They were without ornament, and altogether, their appearance fully justified the appellation of "wild Indians," as applied by the natives of the country" (Parker 1877:400). This trip came to a tragic end when they shot dead an Indian man who tried to attack the intruders with an arrow. Because of this unfortunate incident, Parker decided to return to San Juan del Norte afraid of a massive attack from the Maleku (Parker 1877:403).

Although Parker's expedition did not establish communication with the Maleku, he accomplished other objectives. He revealed for the first time the real or true physical appearance the Maleku, clearing up the incredible legends and stories about their white skin and reddish hair. This finding was confirmed later by Thomas Belt in 1870 and Thomas Bransford in 1877 who saw Maleku men and children at San Carlos and El Castillo, who had been brought by Nicaraguan rubber gatherers (Belt 1911:33; Bransford 1882:680). Five years later, the Bishop of Costa Rica, Bernardo Augusto Thiel, León Fernández and other

people, who visited the Maleku described them as "robust, agile, well formed, and of good character. They were pure Indians and not white, as had been claimed, although in some cases he noticed a trace of white or black blood" (Fernández 1882:677). Parker also discovered a great number of rubber, cedar, and mahogany trees on both banks of the Río Frío, and supposedly a piece of bluish quartz, which yielded very rich returns of both gold and silver (Parker 1877:401-402).

These discoveries changed the prevalent image of the Río Frío and its native inhabitants, awakening the ambition of many Nicaraguan and foreigners living in San Juan del Norte, San Carlos, and El Castillo. In 1868 a group of Nicaraguans attracted by the numerous rubber trees, invaded the Río Frío, initiating a rubber boom that extended from 1868 to 1900. Although there are no references to a gold rush taking place in the Río Frío, there were probably parties exploring for gold and other minerals after Captain Parker's apparent discovery of gold and silver. The Río Frío region is not known for containing precious minerals, nor the Maleku for possessing, using, or wearing gold, silver, or other mineral ornaments.

The relative independent life enjoyed by the Maleku for centuries in the isolated tropical forest and wetlands of the Río Frío came to an end in 1868. The Maleku had the poor fortune to live close to one of the most strategic and attractive regions of the world during the second half of the 19th century. The outbreak of intensive national and international disputes and activities over the control and exploitation of such a privileged region, led to the unexpected uncovering of the mysterious Maleku peoples and the opening of their unexplored ancestral lands. The intrusion of Nicaraguan rubber gatherers after 1868, and the Costa Rican Catholic missionary expeditions after 1882, marked the beginning of a long process of cultural and geographic changes for the Maleku that still continues today.

² There were many canal surveys made and concessions granted to different people and companies during the 19th century. Among these were: John Baily (1837), Louis Napoleon Bonaparte III (1844), Andreas Oerstead (1848), Orville Whitmore Childs (1850-51), Felix Belly (1858), Edward P. Lull (1872-1873), Canal Commission or Ammen's Commission (1876); Thomas C. Reynolds (1885), Robert Peary (1887), Nicaragua Canal Association (1886), which became the Maritime Canal Company of Nicaragua three years laters (1889), Aniceto García Menocal (1889), and Isthmian Canal Commission (1899-1901).

³ A series of events made the Panama route more attractive to the United States government. Firstly, it was the decrease in the price from 109 million dollars to 40 million dollars offered by the French Panama Canal Company of its Panamanian canal concession. Secondly, the eruption of the Momotombo Volcano in Nicaragua on May 14, 1902. Only a few days before Mt. Pelee had exploded on the island of Martinique in the Caribbean destroying the city of Saint Pierre, killing thirty thousand people. The Panamanian lobbyists led by Vanau-Varilla took advantage of these natural events by distributing Nicaraguan stamps to U.S. senators showing Momotombo erupting behind a railroad in the foreground. Thirdly, ratification of the second Hay-Pauncefote Treaty between United States and Britain, which removed the Clayton-Bulwer prohibition of fortification, cleared the way for the United States domination of a canal. Finally, the insurrection that led to Panamanian independence from Colombia in 1903 with the military support of the United States. Within two weeks the United States negotiated a highly favorable treaty with the new independent Panama for the canal construction, acquiring the French concession and providing for the United States control of ten-mile-wide canal route (Woodward 1985:188-190; Clayton 1987:352; Radell 1970:125).

⁴ In 1849 the Nicaraguan government granted to the American Atlantic and Pacific Ship Canal Company of Cornelius Vanderbilt and his associates the exclusive right to construct a ship-canal across her territory at its own expense and to control and manage it for eighty-five years. This company also received the exclusive right to construct rail or carriage roads and to establish

¹ Several people organized expeditions to find a route connecting the central valley with the San Juan River and the Caribbean coast: Joaquín Mora to the Sarapiquí River in 1820; Pío Murillo to the Caribbean slopes of the Barva volcano in 1832-1833; Miguel Alfaro to the Toro Amarillo River in 1846; Luz Blanco to the Sucio River in 1847; Francisco Martínez to the San Carlos River in 1850; and Francisco Otoya to the Poás Mountains in 1859 (Frantzius 1895:10-36; Quijano 1939:412-414).

steamboats and steam vessels on the rivers and lakes, as might be necessary to complete the canal (Pim 1863:222-227). In the event that the construction of the canal became impossible by any unforeseen occurrence, the company agreed to construct a railroad or rail-and-carriage road and water communication between the two oceans (Gámez 1939:261). By these last two provisions, this company obtained in one hand the immediate right to establish a transit to take advantage of the California traffic, and in the other hand, an escape clause to avoid the construction of the canal. Cornelius Vanderbilt and his associates made no attempt to construct a canal, and probably no such idea was intended, as the second charter was obtained on August 1851. It authorized the Pacific and Atlantic Canal Company to create another independent company called Accessory Transit Company with the sole object of transporting thousands of emigrants on their way to California (Folkman 1972:18, 33; Obregón 1956:38; Pim 1863:221-227).

8. Cultural-Historical Reconstruction: Who the Maleku Were

The life of seclusion and isolation enjoyed by the Maleku for centuries on the Río Frío area began to vanish by the end of the 1860s. The arrival of the Nicaraguan rubber gatherers in 1868, and then, the Costa Rican Catholic expeditions after 1882 brought profound geographic and cultural changes to the native indigenous peoples. This chapter tries to recreate the life conditions of the Maleku indigenous peoples around mid-19th century before such changes occurred by focusing on four key aspects: 1) the reconstruction of the historical lands, 2) the estimation of their approximate population size, 3) the characterization of their particular settlement pattern, and 4) the description of their livelihood strategies.

8.1 The Maleku Lands in the 19th Century

Linguistic and genetic studies and local oral tradition stories agree that the Maleku have lived in the Río Frío region since pre-Columbian times (Barrantes 1993; 1998; Castro, Blanco and Constenla 1993; Constenla 1998). The expeditions that took place late in the 18th century and throughout the 19th century also reported the presence of the Maleku indigenous peoples in the Río Frío watershed (Carmona 1897; De la Fuente 1938; De Paula Soto 1976; García Peláez 1852; Frantzius 1895; Obregón 1956; Squier 1860; 1856; Thiel 1896a; 1896b). However, it is uncertain if the Maleku occupied the entire Río Frío watershed, only a fraction of it, or their lands extended beyond its physical boundaries.

Geographers have used the distribution of toponyms as a basis for delimiting and mapping historical indigenous lands. Their use has been successful in reconstructing the former extent of the Lenca, Tawahka Sumu, and Pech indigenous lands in Honduras (Davidson 1991; Davidson and Cruz 1995; Samson 1997; West 1958; 1998). In this study an attempt was made to reconstruct the historical lands of the Maleku based on the distribution of toponyms. These place-names have particular cultural and material values, uses, and meanings for the Maleku, and that provides evidence of the historical occupation, ownership, use, or influence over a geographic area.

The researcher working with local investigators prepared a list of toponyms that were classified in different categories, including: 1) settlement sites, 2) subsistence areas, (3) resting areas, 4) camping sites 5) water features, 6) relief features, and 7) sacred places. For each place-name, we recorded its name, meaning in Maleku and Spanish and its descriptive location. The geographical names collected were plotted onto 1:50,000 topographic sheets and enlarged aerial photographs. Then, their locations were verified directly on the field.

The boundaries of the historical lands were drawn based on the distribution of the place-names on the topographic base map. Figure 8.1 shows the possible extension of the Maleku territory around mid-19th century with the distribution of palenques, some of the main hunting and fishing sites, the sacred places, and the water and relief features. This historic region had an area of approximately 1,100 square kilometers, and largely coincides with the Río Frío watershed. Physical features such as rivers, lagoons, and mountains served as boundaries to the region. According to the Maleku today, this was the territory inhabited, used, and protected by their ancestors before the Nicaraguan rubber gatherers came in 1868.

Within the boundaries of the mid-19th century Maleku ancestral lands seventeen palenques sheltered the native population (Table 8.1). There were five palenques on the Pataste River, two on the Patastillo, and nine on La Muerte River, and one on the Ulhíjali stream, a tributary of La Muerte River. It was not possible to establish the exact locations of two palenques Lharúruqui Chá and Lherréqui Chía located on the Pataste and La Muerte Rivers respectively. The seventeen palenques were scattered over a relatively small area at distances of less than one kilometer apart between the closest palenques (Octaqui Tainh and Piúju Chía), and not more than 8 kilometers separating the two most distant palenques (Catáne Coc and Chaníya Ora). Considering the locations of the palenques, the lower sections of La Muerte, Pataste, and Patastillo Rivers constituted the core or heartland of the past Maleku region. According to local informants there were more palenques situated along the Caño Ciego River and its tributaries, but they did not remember their names and locations.

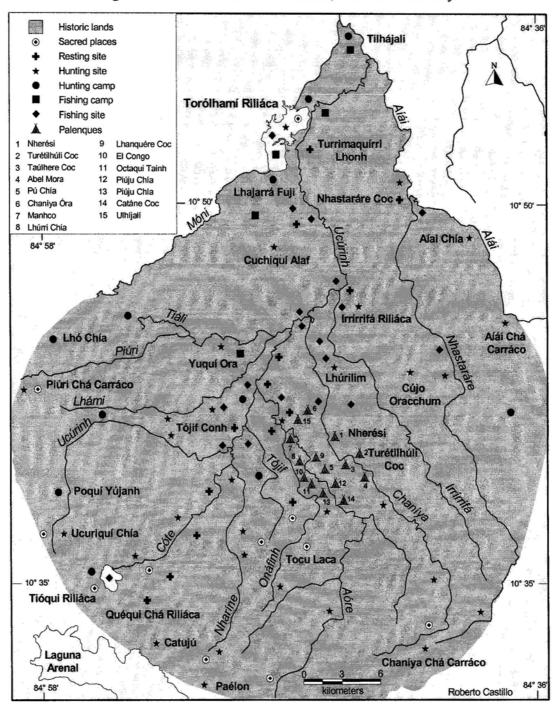


Figure 8.1. Maleku Historical Lands, Mid-19th Century

Palenques	Location		
1. Nherési or Grecia	Pataste river		
2. Turétilhúli Coc	Confluence of the Turétílhúli stream and the		
	Pataste river		
3. Taúlhure Coc	Confluence of the Taúlhure stream and the Pataste		
	river		
4. Abel Mora	Pataste river		
5. Pú Chía	Patastillo river		
6. Chaníya Óra or Tóje	Patastillo river		
7. Manhco or Mango	La Muerte river		
8. Lhúrri Chía	La Muerte river		
9. Lhanquére Coc	Confluence of the Lhanquére stream and La		
	Muerte river		
10. El Congo	La Muerte river		
11. Octaqui Tainh	La Muerte river		
12. Piúju Chía	La Muerte river		
13. Nuíjili Coc	Confluence of the Nuíjili stream and La Muerte		
	river		
14. Catáne Coc	Confluence of the Catáne stream and La Muerte		
	river		
15. Ulhíjali	Ulhíjali stream		
16. Lharúruqui Chá	Pataste river		
17. Lherréqui Chía	La Muerte river		

Table 8.1. Distribution of Maleku Palenques Around Mid-19th Century

1- The name of this palenque came from the Spanish name Grecia, which is the name of a town and County of the Alajuela Province. The Maleku territory was part of the Grecia County until 1975.

- 2- Turétílhúli Coc means mouth of the plantain stream. Lhúli means plantain.
- 3- Taúlhure Coc means mouth of the Taúlhure stream
- 4- The name of this palenque is unknown. Abel Mora is the current owner of the land where the palenque was once located.
- 5- Pú Trúja or Pú Chía mean laurel tree or a place where there are many laurel trees
- 6- Chaníya óra or Tóje means little Patastillo, a smaller tributaty of the Pataste River.

7- The name of this palenque is an adaptation of the Spanish name mango

8- Lhúrri Chía means yolillo tree, or a place where there are many yolillo trees

9- Lhanquére Coc means palenque located at the mouth of the Lhanquére stream.

10- Congo is a Spanish name for Howler monkey. The Maleku name is unnkown.

11- Actoqui or Octaqui Tainh that means palenque located on the edge of red clay

12- Piúju Chía means balsa tree or place where there are many balsa trees

13- Nuíjili Coc is a palenque locate at the mouth of the Mojarra stream

14- Catáne Coc is a palenque located at the mouth of the Catáne stream.

15- Ulhíjali means sandy stream, or stream with a lot of sand

16- Lharúruqui Chá means in the site of the Guácimo tree. It was not possible to determine the exact location of this palenque on the Patate River.

17- Lherréqui Chía means maquenque tree palm or place where there are many maquenque trees. Its exact location on La Muerte River was not established

The majority of the seventeen palenque sites were relatively easy to locate on enlarged aerial photos since most of them occupied sites next to a main river or at the confluence with a smaller tributary. The verification of their locations in the field, however, was no easy task, because of the hot-humid-rainy, swampy, and flooded conditions, as well as unfriendly landowners. On the palenque sites were found old tombs, pottery sheds, and domesticated species such as peach palm, gourd, cacao, avocado, and wild pineapple, which served as evidence of the existence of a settlement in the past, and at the same time, validated the information given by the local investigators.

The historical land map shows that the palenques were located in a central position with respect to important agricultural lands, and gathering, hunting, and fishing areas. The agriculture lands were located near the palenques, alongside the riverbanks where the most fertile, alluvial soils were suitable for growing plantain, banana, manioc, cacao, maize, sugar cane, peach palm, and other crops. The gathering of forest products and materials for diverse uses occurred throughout the whole region, and not particular places were identified as exclusive collecting areas. The most immediate fishing and hunting sites were located along rivers, streams, and riparian forest, and interfluvial forests. These sites were situated within short walking distances from the palenques. There were also hunting and fishing sites located on the Guanacaste Cordillera such as the Tenorio Volcano, the headwaters of the Frío, Buenavista, Samen, Cote, Venado, and La Muerte Rivers, and the Cote Lagoon. The Maleku built tempory huts in these sites where they would stay hunting and fishing for several days at a time. Because of the long uphill trip of about 20-22 kilometers from the palenques to the Cote Lagoon, several resting places were established along the way, which were used by the Maleku in their way up and when returning with heavy loads of smoked fish and meat.

Other important hunting and fishing sites were located on the Caño Negro Lagoon and the surrounding wetland and forest areas. These fishing and hunting grounds were reached mainly by navigating the Río Frío in balsa rafts. Several camps were also set up around the lagoon for fishing, hunting, and mainly catching turtles. Because of the difficulty to operate the flat balsa rafts in the river, and the long way between the palenques and the Caño Negro Lagoon (about 30 kilometers), the trip took several days. For this reason, several camps were established along the Río Frío, which served as resting, hunting, and fishing sites.

Most of the toponyms used by the Maleku are related to places or sites that involve the presence of water. The importance of water bodies most probably are related to the dominance of the lowland's landscape by water features such as rivers, streams, lagoons, swamps, and wetlands. In a lowland tropical rain forest environment, these water features become the most identifiable geographic entities. The water-related ecosystems also contributed enormously to the Maleku's livelihood. In addition, water has religious connotations or values. According to the traditional religion, when the gods came to the world, the chief god assigned a specific territory to each one of them to govern, which usually was a lagoon, a river headwater, or a section a of river. On the contrary, the Maleku culture gave little attention to the relief features such as mountains, hills, and ridges. According to Constenla (1995a:52) the Maleku do not have words in their language to describe relief features. The only generic word used is *octequí*, *octec*, *or octenh* that means both slope and ridge.

Finally, the Maleku historical lands also included sacred places. The headwaters of main rivers such as Venado, Cucaracha, La Muerte, Pataste, Frío, Buenavista, and Samen, including their waterfalls, as well as the Cote and Caño Negro lagoons were considered sacred places because a specific god lived in those places. The most common way to talk about a specific God was by referring to the place in which such God lived. The number of Gods is unknown, but apparently one existed for each important river of the region, with 15 in total (Castro, Blanco, and Constenla 1993:25).

8.2 Maleku Population: How Many They Were?

The size of the Maleku population during the colonial period and most part of the 19th century is uncertain. The lack of historical data on this indigenous group made it difficult to make a reasonable population estimate. This lack of information did not stop Bishop Bernardo Augusto Thiel from providing indigenous population estimates. He estimated the Maleku population to be around 600 in 1569. Living relatively undisturbed

and isolated in the Frío region, the Maleku increased their numbers to 1,000 in 1611 and 1,300 people in 1700. According to Bishop Thiel's estimates throughout the 18th century the Maleku population declined to 800 people, and then, it stagnated at 800 people during the 19th century, at least until 1844 before the arrival of the Nicaraguan rubber gatherers in 1868 (Thiel 1902:16-21,28-30). Thiel does not give any insights into such decline and stagnation of the native population in those centuries. In addition, he does not specify the data and method used to calculate the indigenous population, which raise serious questions about the reliability of his estimates.

Other authors also provided unsubstantiated estimates of the Maleku population. León Fernández, a Costa Rican historian who visited the Maleku palenques in 1882, admitted that although the native population was not counted in that particular trip, he roughly estimated their numbers at not less than 600 (Fernández 1882:677). Daniel Carmona, a priest who accompanied Bishop Thiel in his fifth trip to the Malecu palenques in 1896, pointed out that only a few years earlier, the indigenous population numbered more than 2,000 (Carmona 1897:218). Finally, Adolfo Constenla, a linguist involved in the study of the Maleku grammar and culture, considered that by the 1850s there were around 1,500 indigenous peoples (Constenla 1988:31).

Due to the great differences in the population estimates provided by these authors, an attempt was made to calculate the Maleku population around the mid-19th century. Using the data collected from historical sources and field research, the Maleku population was estimated in four different ways. The first three estimates are based on the ethnographic data collected by Bishop Thiel during his five visits to the Maleku communities between 1882 and 1896. The last calculation is based on the data gathered by the present researcher from the three local investigators and key informants while doing field research.

8.2.1 First Population Estimation

The first method of estimating the Maleku population was done using data collected by Bishop Thiel in his first and second expeditions to the Río Frío territory in April-May 1882 and June 1882. During these expeditions Bishop Thiel found eleven palenques located alongside the Pataste, Patastillo, and La Muerte rivers. In nine of the eleven palenques, he recorded the number of houses (Table 8.2). He also counted the number of fireplaces found in four of the eleven palenques visited. Usually several nuclear families with kinship ties lived in a single large multifamily house, and each nuclear family had its own fireplace. So, the number of fireplaces represented the number of nuclear families living in a multifamily house.

Using data from Table 8.2 the following calculations were made (Table 8.3). By multiplying the average population per palenque (95.38) by the number of palenques (11), a total population of 1,049 was estimated. If it is assumed that the palenques had 5 multifamily houses each, then, the total population increases to about 1,128.

Palenques	Location	Number of Multifamily Houses	Number of Fireplaces
First expedition	on, April-May 1882		
Palenque 1.	Pataste river	Several large houses	20
Palenque 2.	Tributary of the Pataste river	3	20
Palenque 3.	Pataste river	4	-
Palenque 4.	Pataste or Patastillo rivers	2	-
Palenque 5.	Tributary of the Pastate river	3	-
Palenque 6.	Pataste river	10	30
Palenque 7.	La Muerte river	Great number of	21
-		large houses	
Second exped	ition, June 1882		
Palenque 8.	Pataste river	4	-
Palenque 9	Pataste river	-	-
Palenque 10.	Patastillo	-	-
Palenque 11.	Patastillo	3	-
Total		29	91

Table 8.2. Maleku Palenques Found by Bishop Thiel in 1882

Sources: ACM 1896a; La Gaceta 1882:1278; 1882:1279; 1882:1297; 1882:1298; 1882: 1299; Thiel 1896a:17-23; 1927:23-28.

Estimated population is just an approximation. The fact that palenque 5 was not inhabited at the time, and palenque 7 was a tempory one, might contribute to the overestimation of the native population. Despite these shortcomings, the Maleku population might have been higher for two reasons. First, in his first visit to the Río Frío area Bishop

Thiel mentioned seeing 14 large multifamily houses to the east of the Pataste River, in the direction of the Caño Ciego River and its tributaries (Thiel 1896a:22-23; 1927:32). Unfortunately, Thiel did not provide additional information about the locations of the houses, the number of fireplaces, and the number of palenques that the 14 multifamily houses formed. Local informants indeed agreed there were more communities located along the Caño Ciego riverbanks and some of its tributaries, but they do not remember their names and locations. Second, the estimated population does not account for the palenques never discovered or visited by Bishop Thiel's party in 1882, or for the palenques that had already disappeared due to the rubber gatherers actions. Through local informants Bishop Thiel knew of the existence of more indigenous communities located on La Muerte River but never had the chance to visit them. He also was unaware that new palenques had already been established on El Sol River by 1882, including the present-day palenques of Margarita and Tonjibe. Apparently, families and whole communities on the Pataste, Patastillo, La Muerte, and probably Caño Ciego Rivers, in an attempt to escape from the rubber gatherer raids and actions, moved to El Sol River and established new palenques there.

Number of palenques visited		11
Number of multifamily houses counted in 7		29
palenques		
Average of multifamily houses per palenque	(29 ÷7)	4.14
Number of fireplaces counted on 13		50
multifamily houses		
Average of fireplaces per multifamily house	(50 ÷ 13)	3.84
Average of members per nuclear family ¹		6
Average of individuals living in one	(3.84 x 6)	23.1
multifamily house	. ,	
Average population per palenque	(23.04 x 4.14)	95.38
Total population	95.38 x 11	1,049

Table 8.3 Maleku Population Characteristics

¹An average of 6 members per family was suggested by the local investigators based on their own and other families experience. Today the average of members per family among the Maleku is around 5.

8.2.2 Second Population Estimation

Data collected by Bishop Thiel in his last trip to the Maleku communities in 1896 was also used to estimate the native population size. The data of 1896 reflects the indigenous demographic conditions after 28 years of genocidal actions by the Nicaraguan rubber gatherers. Bishop Thiel visited eight of the eleven prevailing palenques, where he counted the population and the number of recent, fresh tombs found inside the houses (Table 8.4). Population estimates of the other three palenques were obtained through local informants. References were also made to the number of individuals taken as prisoners to Nicaragua to be sold as slaves. The historical records do not mention any causes for the disproportionate number of recent deaths among the Maleku. The high mortality was most certainly caused by new diseases introduced by the Nicaraguan rubber gatherers, which is reinforced by the fact, according to Maleku burial tradition, that only those people who died of aging or disease related were buried inside their houses.

Palenques	Men	Women	Children	Total	Burials
El Sol river			······		
Tójifá	26	12	9	47	25
Margarita	24	13	17	54	60
José Joaquín	15	11	13	39	101
Lhafára	8	5	7	20	18
Culolo	9	8	4	21	23
Napoleón	8	5	3	16	36
Cucaracha river					
Juana	8	5	4	17	26
La Muerte river					
El Congo	10	3	3	16	9
Manhco or	8	3	1	12	?
La Muerte					
Pataste river					
Grecia	11	4	3	18	?
Patastillo river					
San Juan	5	1	1	7	?
Total	132	70	65	267	298

Table 8. 4. Distribution of the Maleku Population by Palenques, 1896

Sources: ACM 1896d; Carmona 1897:147-218; Thiel 1896b:70-92; 1927:114-151.

Bishop Bernardo Thiel, León Fernández, and the other Costa Ricans who participated in the first expedition to the Guatuso territory in 1882, and then visited the Nicaraguan towns of San Carlos, Granada, and El Castillo, and witnessed the Maleku slave trade. Children and young women between 6 and 14 years were taken as prisoners by the huleros and brought down to Nicaragua to be sold as slaves (Carmona 1897:136-37; Fernández 1882:675; Thiel 1896a:14; 1927:17,30,39,44). Bishop Thiel reported more than 60 Maleku slaves in San Carlos; around 50 to 60 in Granada; and more in other towns such as Rivas, León, Managua, San Juan del Sur, El Castillo, and San Juan del Norte (Thiel 1896a:26; 1927:38). The ex-president of Nicaragua himself, Pedro Joaquín Chamorro, had bought three young Maleku men from huleros to work in his hacienda, and two more had been taken to New York (La Gaceta 1882:1284). Bernardo Thiel estimated the number of Maleku captured by the rubber gatherers and taken to Nicaragua at about 500, of which approximately half perished of diseases and maltreatment (1896a:13,29; 1927:17).

The number of local individuals who were killed by the Nicaraguan rubber gatherers defending their people and territory is uncertain. Oral tradition and historical sources indicate that an important battle took place on La Muerte River in 1868. In this battle participated many indigenous men armed with bows and arrows against a smaller party of Nicaraguan rubber gatherers, who were better armed with guns, dogs, and machetes. It is believed that Maleku men in the hundreds were killed (Carmona 1897:142,147,152; Frantzius 1925:229; Salguero 1981:491; Thiel 1896a:13; 1927:119). But the killing did not stop there, it continued for several more years. As late as 1896 two native men were killed, two more wounded, women raped, men forced to work, and house utensils and crop harvests stolen by the Nicaraguan rubber gatherers (ACM 1896d; Carmona 1897:152,205; Thiel 1896b:73,88; 1927:118,143). According to local informants, a conservative estimate of the number of indigenous people killed by the Nicaraguan rubber gatherers from 1868 until 1896 was around 200.

The Maleku population was estimated at 1,265 people by adding the following figures:

1) People alive in 1896:	267
2) Recent deaths counted in 1896:	298

3) People who had being killed by the rubber gatherers since 1868:	200
4) People who had been lost to slave trade:	500
5) Total Maleku population	1,265

This estimated population, however, does not take into account the recent burials in the three palenques of La Muerte, Grecia, and San Juan, which were not visited by Thiel in 1896. The average number of recent tombs found in the five palenques with 21 or less people (22) was applied to three unvisited palenques, which resulted in an addition of 66 more recent deaths. In addition, the native people who died in the forest escaping from the rubber gatherers were not considered in the calculation either. Afraid of the rubber gatherers, indigenous people fled into the forest with their children, where without shelter and food and exposed to heavy rain, high humidity, cold nights, and poisonous snakes, many people, especially children likely perished (Carmona 1897:155; Thiel 1927:142). Local informants believe that at least one hundred people lost their lives in this way. Thus, adding the additional numbers of deaths to the estimated population, it is expected that the total Maleku population could have reached more than 1,430 people.

8.2.3 Third Population Estimation

The third method of estimating the indigenous population was done using the data collected by Bishop Thiel in his first and second trips, and the settlement information collected through collaborative field research. Instead of 11 palenques found by Bishop Thiel, their number increased to 17, the number of palenques that local investigators believe existed around mid-nineteenth century. Working together with local investigators 17 past palenques were identified. The precise location of these settlement sites was established in the field, and then, plotted on 1:50,000 topographic sheets.

According to the calculations made using the data collected by Bishop Thiel in 1882, the average population per palenque was 95.38, which multiply by the 17 palenques in existence at that time resulted in a total population of around 1,621. If assumed that the palenques 1 and 7 had an average of 5 multifamily houses each (Table 8.2), then, the average population per palenque increases to 102.62 and the total population to 1,744.

8.2.4 Fourth Population Estimation

The issue of the native population size before the arrival of the Nicaraguan rubber gatherers in 1868 was discussed with local investigators and some key informants. They agreed that the number of palenques was 17, although some strongly believed there were more palenques. Each palenque was composed of four multifamily houses, and in each multifamily house lived at least 5 nuclear families. The number of people comprising a nuclear family was 6. Using these numbers the total Maleku population was estimated in the following way:

a) Members per nuclear family = 6
b) Number of nuclear families per multifamily house = 5
c) Number of multifamily houses per palenque = 4
d) Number of palenques = 17
Total population = a(6) x b(5) x c(4) x d(17) = 2,040 people.

In conclusion, the Maleku population by the mid-19th century according to the four estimations oscillated between 1,050 and 2,040 people. These estimates are clearly within the estimation ranges of Constenla (1500) and Carmona (2000), and a little higher than those proposed by Thiel (800) and Fernández (600). Taking into consideration the limitations and shortcomings of the data and methods used, an acceptable estimation for the Maleku population in the mid-19th century would be between 1,500 and 2,000 people.

8.3 Settlement Pattern

This section describes where the Maleku population lived and how it was distributed in the immediate geographic area. In addition, it provides insights into the factors explaining the nature of the group's settlement pattern. The description of the Maleku's past settlement pattern was based on historical sources, particularly the visit accounts of Bishop Thiel and Daniel Carmona to the Guatuso area between 1882 and 1896, which contain good ethnographic descriptions of the Maleku communities. In addition, the interviews conducted by the researcher with the seven key local informants, and the working sessions with the three local investigators also provided valuable information to characterize the nature of their settlement pattern.

The mid-19th century Maleku were grouped together in about 17 permanent settlements or palenques located alongside La Muerte, Pataste, and Patastillo Rivers (Figure 8.2). A typical palenque had four or five large thatched houses clustered closely together, and usually situated on the same side of the river or stream. Each house was home to four or five nuclear families bound together through consanguineal or marriage ties, including about 25 or 30 members. So, a palenque was composed of several extended families, whose population could range between 90 and 120 people. Four spheres or levels of organization were used to characterize the Maleku settlement pattern: 1) as a geographic site, 2) as a multifamily unit, 3) as a community, and 4) as a set of communities.

8.3.1 As a geographic site

Maleku society was divided into relatively small groups of people who lived in separate riverine communities or palenques. Each one of the palenques as a geographical entity occupied its own specific site, which included: 1) The multifamily dwellings located alongside La Muerte, Pataste, and Patastillo high riverbanks, natural levees, and terraces, and particularly near the confluences of some of their small tributaries. 2) On both sides of the riverbanks and surrounding the multifamily residential units were situated the agriculture lands devoted to cacao, plantain, and swidden maize plantations intermixed with fallow plots. 3) Up-and-downriver from the multifamily dwelling units were located the fishing pools or grounds. 4) Beyond the agriculture lands and fallow plots, there was uncleared primary forest with wild plants and animal resources used for hunting and gathering activities. The section of uncleared forests also served as boundary lines dividing or separating the territorial domains of each community (Carmona 1897:151).

Each palenque located on a river with its cleared area of residential, agricultural, and fallow lands, and nearby fishing and hunting grounds shaped its immediate territorial domains, and gave each palenque its own geographic identity and unity.

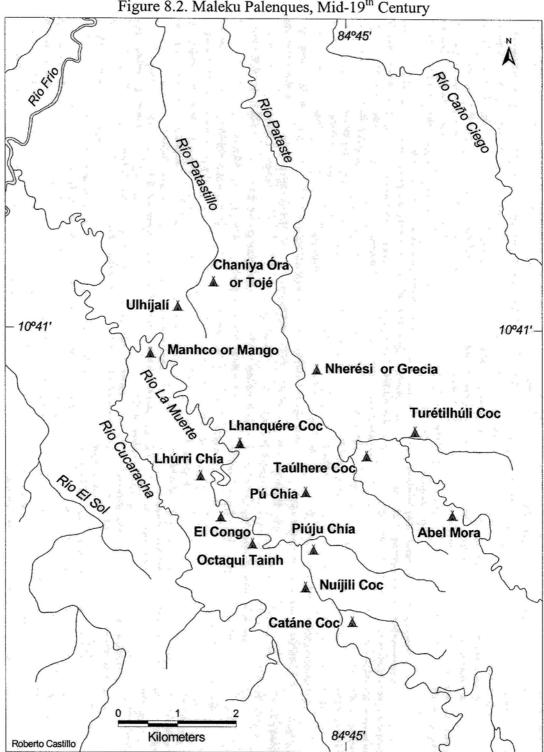


Figure 8.2. Maleku Palenques, Mid-19th Century

8.3.2 As a Multifamily Unit

The palenques were composed of three or more residential units. Each residence sheltered a large extended family, which served as the basic domestic group in Maleku society. The larger of the traditional multifamily houses could have measured 25 meters long by 15 meters wide. The houses were low, taller in the middle, built of heavy wooden frames, rectangular in ground plan with an angular roof, pitching both ways from a ridge pole, and resting on very short but very thick posts. The house roof was thatched with palm leaves, and was entirely open at the ends and sides, under the eaves (Carmona 1897:146-147).

In these multifamily houses each nuclear family had an assigned space. Along both sides of the house families built on the ground their own fire hearts for cooking, and on top of which were placed small racks for smoking fish, meat, plantain, and peach palm. Around or next to the fire hearths individual families placed wood stools and hammocks. Men and their children slept in these hammocks while women slept on coarse, plain blankets made of pounded mastate (Brosimun utile), burío (Heliocarpus appendiculatus), or rubber tree barks. The central area of the house was reserved for human burials enclosed by a balustrade of thin, rounded wood sticks tied together with lianas to prevent people from stepping in since they were considered sacred places. At one of the ends of the house were situated large pottery jars, half buried in the ground for making *chicha*. Another structure adjacent to the large multifamily house might have included a mastate hut used specifically by women to give birth (Thiel 1896a:26). Although the nuclear families occupied their own space within the house around a fireplace, and did the cooking separately, they were not socially and economically independent. It was the extended family that served as the basic domestic group or household unit. Often great grandparents or grandparents formed the nucleus around which the multi-generation of individuals belonging to the same extended family was organized (Cruz, Elizondo, and Cruz 2000: pers.comm.).

The extended family households operated not only as kin-based units of residence but also as the basic unit of economic production. They provided the social structure by which most domestic affairs and subsistence tasks were organized. The basis of this cooperation was a division of labor characterized by sex and age. Men worked in agriculture, house building, raft building, hunting, and fishing activities. Women did collecting firewood, gathering fruits, fishing, preparing meals, *chicha*, and chocolate, care for the children, and making hammocks, fishing nets, carrying bags, and pottery jars. Boys did some fishing, hunted small animals and birds, and helped with the planting, weeding, and harvesting of crops as well as gathering of edible fruits. Girls took care of little brothers and sisters, carried water from streams, collected firewood, and helped with domestic affairs. Old men and women helped making arrows and bows, spears, throwing sticks, fishing nets, carrying bags, drums, gourds, house utensils, and hammocks (Carmona 1897:165; Cruz, Elizondo, and Cruz 2000:pers.comm.).

The extended family households not only pooled their labor resources but also their property resources. Land, especially fertile riverine sandy alluvial soils, located near their houses and suitable for cultivation, was held communally by the extended family. Each extended family held usufruct rights over any land plots that they had cleared for agriculture. In this way, valuable agriculture land was prevented from being continually subdivided into smaller plots. Extended families also obtained usufruct rights over river resources by feeding the fish with cedar seeds, cacao, and plantain. Members of the same extended family fished on their own fish-river pools and respected those of other families. The same practice apparently applied to the hunting activity. Extended family members hunted together, and had their own specific sites where they set up holes, built bird snares, and installed other game traps (Elizondo N. 2000:pers.comm.).

The head of the family, usually the oldest male or founder of the family, coordinated the daily subsistence activities of the family. He basically organized when, where, and who did the hunting, fishing, gathering, agriculture, and other subsistence activities. The products and materials produced and collected by household members were distributed among the constituent nuclear families by the head of the household (Elizondo L. 2000:pers.comm.). The large size of the extended family made possible for its numerous members to engage in different activities at the same time: some fishing, other hunting, other subsistences and house artifacts. This was a survival strategy,

in which all the family's members working together contributed toward the welfare of the entire family.

8.3.3 As a Community

The extended family members, related to each other through kinship ties and descending from the same family ancestor or community's founder, produced close-knit communities with members having a high degree of solidarity and interaction with one another. Since most residents of a community had consanguineal ties, monogamic marriages more often occurred between individuals from different palenques. Thus, communities were exogamic.

In terms of the postmarital residence pattern the Maleku society practiced matrilocality. According to local informants matrilocality was the preferred postmarital residence, but because it was not mandatory or obligatory, patrilocality was also practiced. Anyhow, the practice of either matrilocal or patrilocal postmarital residence drew three or more generations of related individuals together into large extended family households, which eventually led to the conformation of palenques. In addition, the Maleku followed bilateral descent, in which individuals exhibit no preference for either matrilineal or patrilineal kin, and consider themselves equally related to both groups (Bozzoli 2003:pers. comm.).

The internal unity of the community was revealed on specific occasions such as celebrations and funerals. A palenque's population would periodically engage in social celebrations, drinking *chicha*, dancing, and singing. When somebody died not only the closest relatives but also the whole palenque mourned the death for several days, during which they abstained from any social celebration (Morera 2000:pers.comm.). Labor exchange, food sharing and other interchanges integrated members of a palenque. In the event that particular tasks were too complex to be carried out by a single household, it was likely that relatives, neighbors, and friends joined together to complete the task (Carmona 1897:177; Thiel 1896a:19). There were two types of exchange labor arrangements: *chichada* and *mano vuelta*. *Chichada* was a form of communal work in which a family interested in

clearing a field, doing a planting, weeding an agricultural field, collecting a harvest, or building a house offered food and *chicha* (fermented alcoholic beverage) to relatives, friends, and neighbors in exchange for their cooperation. The system of *mano vuelta* was a labor exchange system in which relatives and neighbors helped each other in agricultural tasks and house-building activities without any pay involved. However, it was expected that the beneficiary family would engage in similar labor activities with their contributors when needed. The slogan was "today for you, tomorrow for me" (Castro E. 2000:pers.comm.).

Although, domestic groups were probably self-sufficient units, food sharing and exchange occurred among households. Food sharing consisted of giving an extra food gift (wild meat, fish, plantain, corn, cacao, manioc, peach palm) to relatives and neighbors on a reciprocal basis, which means the food-giving family expected to receive something of similar value in return from the recipients within a specified period of time. Food sharing was also important in the *chichada* labor exchange system. The other type of reciprocal food exchange was the interchange of products or foodstuffs. Families and neighbors interchange different amounts of extra foodstuff such as cacao in exchange for corn, manioc for plantain, fish for meat, peach palm for sugar cane, and so on. This reciprocal exchange of foodstuffs served to maintain social ties and palenque cohesion (Elizondo E. 2000:pers.comm.).

From the political standpoint, the community functioned as autonomous political unit headed by an informal leader, who probably was either a medium (*Tócu lhóqui cuácuacsufamaráma*), not to mention the palenque's elder or founder, or the palenque founder's descendant. The medium was a person with the power to communicate with the spirits of the dead and the gods (*tócu maráma*). People turned to the medium for answers about events in the past, the present, or the future. Then, the medium consulted the spirits and gods in direct interview with them in isolated places near the river's headwaters and transmitted the answers from them to the people. The medium also watch over a person's good behavior and defended them from bad spirits or temptations (Carmona 1897:179; Castro, Blanco, and Constenla 1993:36-39).

The local investigators agree that the Maleku was historically an egalitarian society since there were not marked differences in status, prestige, rank, and wealth. Although, the

community leader had a lot of influence upon palenque residents, his authority was informal and had a limited degree of power. It appears that he ruled more by consensus than coercion following his own interpretations of traditional customs. The faith in supernatural forces such as gods (*tócu maráma*) and the belief that these gods would punish them for doing something wrong probably served as powerful deterrent or dissuading mechanism of social control used by the palenque leader. It is uncertain if this position of palenque leader was hereditary. But if a son had father's abilities he would likely succeed into his father's position of respect and importance in the community.

8.3.4 As a Set of Communities

Relations between communities or palenques were apparently friendly and harmonious. A celebration which included drinking *chicha*, dancing, and singing was probably the most important social event involving people from several palenques. This kind of celebration occurred several times during the year, and each palenque took turns to organize such a festivity to which people from different palenques came to enjoy and participate. These celebrations offered the best opportunities for men and women to meet potential future wives and husbands (Castro L. 2000:pers.comm.).

Men from different palenques also engaged in cooperative work to clean trails connecting their palenques, to install rustic bridges, and to build balsa rafts used in common for fishing trips to the Caño Negro Lagoon in the dry season. The *chichada*, the exchange of labor for food and *chicha* was also a popular practice between different palenques (Carmona 1897:176; Thiel 1927:118). Other important activity in which people from different palenques participated together, were the fishing trips down the Frío River in October to capture a particular species of mojarra, and to Caño Negro Lagoon in March and April to catch turtles. Rafts were built together and the loads of fish and turtles were distributed among members of the palenques participating in the trip. People from several palenques also undertook long (3-5 days) hunting trips to distant places such as the Tenorio Volcano, the Cote Lagoon, and the headwaters of the Buenavista and Frío Rivers (Cruz, Elizondo, and Cruz 2000:pers.comm.).

The analysis of the information available suggests that the different palenques functioned as autonomous political units. However, under certain circumstances, notably for purposes of defense against external threats, the palenques might have been temporarily consolidated into a political alliance under the leadership of a particular individual chief. According to local investigators, this chief figure was referred to by a particular name Urojua, which in Maleku language means chief warrior. He wore curassow feathers on his forehead and carried a special carved staff, which symbolized authority. The chief political position could have been occupied by a medium (Tócu lhóqui cuácuacsufa maráma), a religious leader, whose alleged supernatural powers definitely reinforced his political authority. As the chief warrior, he was supposed to organize and lead their people into war. Alliances among palenques were demonstrated several times in the past when the Maleku altogether confronted attempts to conquer and subjugate their population in 1783, 1849, 1856, and the 1870s and 1880s. However, the alliance was not a permanent political fixture. When the threat was eliminated or ceased, the palenques apparently returned to their autonomous political state. The chief warrior continued to play his religious and social roles, and he remained in power probably as a symbol of political unity, in case a new external threat arises. Neither documents nor Maleku oral tradition give any indication that such temporary alliances among the palenques ever became permanent enough to develop into a structured hierarchical political system.

In conclusion, the Maleku was an egalitarian society. Except for the chief warrior, palenque leaders, and some religious leaders with special powers, who might periodically enjoy some social status and limited political authority, the rest of the people remained relatively equal. Inter-group stratification was absent among the Maleku groups, community activities were voluntary, and local leaders ruled more by consensus than by coercion.

8.3.5 Riverine Settlement Pattern

The Maleku huddled together in separate riverine settlements or palenques. The questions here are why did they settle in dispersed riverine palenques and not, for example, in dispersed and isolated forest or riverine dwellings? Why did they locate their palenques

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next to rivers and streams? What socio-political and environmental factors explain the nature of the Maleku settlement pattern?

Among the social and political factors contributing to the origin and development of separate palenques were: (1) the postmarital residence patterns of matrilocality, and in less degree patrilocality, practiced by the Maleku society, (2) the presence of the extended family as the basic social and economic domestic unit, (3) the Maleku custom to marry outside their own communities, and (4) the absence of a strong structured political system that allowed the palenques to function as autonomous political units.

There are at least four geographical and environmental factors that might have influenced the Maleku to settle in separate palenques alongside rivers.

1) The floodplains of the Río Frío are characterized by the presence of many rivers, streams, marshes, swamps, and wetlands subjected to periodical floods during the rainy season, prompted the Maleku to establish their settlements on available dry points of higher elevations. The top of small hills and slopes, high riverbanks, natural levees, and elevated terraces were the most suitable settlement sites. Thus, the Maleku built their houses on these higher sites as a preventive measure or strategy to avoid the detrimental effects of floods.

2) Settlements were established on high flood-free sites, but also near or at the confluence of a main river and a smaller tributary. A small stream or creek supplied the palenque's residents with clean water for drinking, cooking, and other domestic uses while the main river ensured them a place for swimming and bathing. Water from the main river was not used for drinking or domestic purposes because the river was traditionally used as a place for defecation. In addition, during the rainy season the main river's water level increased as well the sediment load in suspension and its waters became muddy and unhealthy for domestic purposes. On the other hand, the smaller stream or creek provided clean water all year around. The Maleku also wanted to be close to a river or stream because they believed river baths not only helped to clean their physical bodies but also to purify their souls and spirits. So, they took many river baths during the day to get rid of or wash out bad spirits and thoughts. For example, the first thing a woman did immediately after having a baby was to get into the river to clean and purify, not only physically but spiritually as well.

(3) The most suitable areas for agriculture production were limited to riverbanks, natural levees, and river terraces because of their fertile, well-drained sandy alluvial soils. Therefore, palenques were established strategically on riverine sites whose lands around them and along both sides of the riverbank were suitable for agriculture. Poor fertility and drainage conditions of soils, and difficulty of carrying out crops, prevented the Maleku from establishing agriculture fields on interfluvial rain forest areas, away from the main rivers.

(4) Another factor that attracted the Maleku to settle near river sites was the abundance of fish. Along main riverbeds there were natural pools that produced or concentrated great amounts of fish, which became very popular fishing grounds. The Maleku tried to locate their palenques in front or near the attractive river fishing pools, in order to have easy access to fish sources. The Maleku still recognized and fish in the same river fishing pools used by their ancestors, and in the case of La Muerte and Pataste rivers, their locations coincide with the spatial distribution of ancient palenques located alongside these rivers. The riverine sites were also attractive because of the abundance of other aquatic life such as turtles, langoustine, and crabs, while the gallery forest provided game species, enabling a more consistent and dependable supply of animal protein.

One expects that an important reason for the Maleku's adaptation to the river margin habitat was to take advantage of the rivers for communication. However, they apparently did not excel in navigation skills. Despite the fact that rivers such as Frío, Buenavista, La Muerte, Pataste, Caño Ciego, Sabogal, and Buenavista were suitable for navigation, the Maleku did not build canoes and boats for water transport. The only device constructed for navigation was a flat raft made of large poles of balsa tree tied together with lianas and ropes of burío bark. This rough raft 2-2.5 meter long and 1.5-2 meter wide were designed to make dry-season trips to Caño Negro lagoons and other sites along the Río Frío for hunting and fishing purposes. This kind of flat raft was difficult to maneuver down river and even more difficult to push up river. The balsa rafts were not built for communication purposes.

It is intriguing that the Maleku did not develop more sophisticated water navigation skills and devices. The location of the palenques, relatively close and within short walking distance of each other probably did not contribute to the Maleku innovating in water communication. Instead, they developed numerous overland trails that connected the various palenques together. This lack of invention might be considered proof of the long geographic isolation experienced by the Maleku, and their lack of contacts with neighboring indigenous groups such as the Rama and the Voto, and later the Spaniards, who used boats and canoes to navigate Lake Nicaragua, San Juan River, and other main rivers of the region. In addition, this lack of water navigation skills and devices could also be related to the alleged Maleku geographic origins outside the navigable lowland rivers, mostly located around or above the line of canoe navigation. This hypothesis is supported by the oral tradition of the Maleku people that considers their creation based on the headwaters of the Río Frío's tributaries such as Buenavista, Cote, Venado, La Muerte, Pataste, and Caño Ciego. The headwaters of these rivers are located on the northern slopes of the Guanacaste Cordillera where river navigation is practically impossible.

8.4 How the Maleku Made a Living

The traditional lifestyle of the Maleku was well adapted to the diversity of freshwater and terrestrial ecosystems, and to the annual cycles of nature in northern Costa Rica. They secured primary needs through different subsistence activities such as small-scale agriculture, hunting, fishing and aquatic hunting, gathering, and animal husbandry. The purpose is to address the broad question of how the Maleku made a living by providing a description of the subsistence activities that provided the base of their past livelihood. The description refers to the subsistence activities practiced by the Maleku in the late 19th century, when they still maintained most of their ancestral lands and their indigenous cultural identity.

The following description of the Maleku past subsistence activities is mainly based on the information shared with me by the three local investigators. The description was organized around five food-procuring activities: agriculture, hunting, fishing, gathering, and animal husbandry. The three local investigators, because they have such intimate knowledge of the community's past subsistence activities, were able to describe each activity separately in terms of its main distinctive ecological, technological, social, and geographical aspects. The researcher recorded the information on large paper. Using the same dialectic work, the researcher and local investigators together reconstructed the annual agricultural cycle, and prepared an inventory of the most important crop, game animals, fish, and plant species used by the Maleku in the past, including a list of animals that were part of their food taboos. Additional valuable information was also provided by the personal interviews conducted by the researcher with seven key local informants, the field observations and conversations with local residents made by the researcher while participating in their fishing, hunting, and agricultural activities, and a few historical documents.

8.4.1 Agriculture

Agriculture was one of the most important components of the Maleku livelihood and indigenous households maintained two types of cultivation systems: (1) plantain and cacao fields, and (2) swidden maize fields.

8.4.1.1 Plantain and Cacao Fields

The plantain fields consisted of a relatively scattered distribution of plantains interplanted with other crops such as banana (*Musa sp.*), manioc (*Manihot sp.*), tiquisque (*Xanthosoma sp.*), dasheen (*Colocasia esculenta*), squash (*Cucurbita sp.*), chili pepper (*Capsicum sp.*), and sugar cane (*Saccharum officinarum*). Fruit trees were also cultivated in the mix, including peach palm (*Guilielma sp.*), avocado (*Persea americana*), and achiote (*Bixa orellana*). A variety of spared useful forest trees were left standing during initial field preparation (Cruz, Elizondo, and Cruz 2000:pers.comm.).

In the case of the cacao cultivation system, upperstory shadow requirements for the cacao trees, fruit trees were cultivated and tall forest trees were left standing. In addition, useful undergrowth plant species such as wild platanillas (*Heliconia sp.*), lianas, herbs, ferns, and palms were also associated with the cacao trees.

The cacao and plantain fields were usually established near the dwellings, alongside the banks of the rivers and streams that the Maleku inhabited. Distant plantations along alluvial strips of non-permanent inhabited rivers such as Frío, Buenavista, Cote, Venado, Cucaracha, and El Sol were also maintained (Carmona 1897:146; Thiel 1927:153). The local investigators suggest that the size of the plantain plots ranged from 0.3 to 0.4 hectares and that of the cacao from 0.2 to 0.3 hectares per household. Large extended family household units composed of 20 to 25 members had several plots in different locations at varying stages of production, in order to secure food supplies and other useful materials all year-round (Cruz, Elizondo, and Cruz 2000:pers.comm.).

Today, most of the Maleku people do not have cacao and plantain fields as those of their ancestors. Only two cacao and plantain fields, resembling those of the past were found in the Tonjibe community. The researcher and the three local investigators undertook a detailed survey in these two remaining plantation fields to show their rich composition and economic benefits. The study of these two traditional plantation fields provided valuable insights into the Maleku past agriculture activities. In the one-hectare cacao field was found 15 different crops, including three of recent introduction, and around 36 useful wild plants. Products and materials from the cacao plantation were employed in 23 different uses, among which the more common were for food, house building, firewood and medicines, and for preparing fermented beverages (Table 8.5). In the case of the plantain field the number of cultivated and wild species was higher with 25 and 50 respectively, while the products and materials harvested were employed in more than 23 different ways (Table 8.6). Both cultivation fields are also characterized by their high genetic diversity owing to the presence of many varieties of the same plant, including seven varieties of peach palm, six of plantains, five of bananas, five of cacao, four of manioc, three of avocado, and many others.

It is important to mention that some crops had many different uses in the past. For example, pejibaye or peach palm was used as a staple food, as a provider of thatch materials, for making *chicha* drink, bows, arrows, lances, digging sticks, and wood machetes. Today, peach palm is used only for consumption and commercial purposes. The cacao and plantain fields were also important areas for hunting wild animals such as paca (*Agouti paca*), agouti (*Dasyprocta punctata*), armadillo (*Dasypus novemcintus*), collared

peccary (*Tayassu tajacu*), and white-lipped peccary (*Tayassu pecari*). The hunting activities in these fields have been reduced to squirrels (*Sciurus sp.*), armadillos, and some varieties of birds. The field estimates obtained from the two surviving cacao and plantain plots in Tonjibe are probably conservative when compared to past cultivation fields. However, the current estimates give an approximate idea of the diversity and economic importance of past cacao and plantain fields as sources of multiple foodstuffs and materials year-round.

Uses	Cultivated Species	Wild Species
Food	Avocado (3), cacao (5), chili	Hog plum, sonzapote, pacaya
	pepper, peach palm (7),	(palm), Wild platanilla, quicúru
	banana (5), lemon,* lime,*	(liana) yam (2), júronh (palm),
	tiquisque, plantain (6), guineo	guaba (3), guava (3), wild cane,
	(2), orange, * manioc (4)	pataste or wild cacao.
Food for wild animals	Peach palm, plantain, banana	Hog plum, guaba, guava, ojoche
House-building		Laurel, cedar, chilamate, fruta
materials		dorada, pavo, sangregado,
		pechipán, lagartillo, madero de
		montaña, gallinazo, mangle.
Roof thatch	Peach palm, plantain	Platanilla, bijagua, pacaya
Arrow, bow, lance,	Peach palm	
machete, sticks		
Household utensils	Jícara (gourd) or guacal	
Baskets		Maóca (palm)
Drums		Cedar
Stools		Cedar, laurel
Drinks (no alcoholic)	Cacao, plantain	Pataste
Chicha (alcoholic	Peach palm, plantain, manioc	
beverage)		
Firewood		Guácimo, mangle, guaba,
		lagartillo, madero de montaña, and
		pechipán.
Necklaces		Poró silvestre (seeds)
Bark cloth		Rubber, mastate, chilamate
Medicine		Jiñocuabe, raíz de india, caña
		agria, rubber, caobilla, cedar
Fishing bait	Cacao, plantain	Caobilla, pataste, guava
Condiment	Achiote, chili pepper	Santa María, guatil rojo
God's offering	Cacao	Pataste
Dye		Guatil rojo, wild cane
Make up	Achiote	Guatil rojo
Sweep		Júronh (palm)
Light		Rubber (gum)
Food wrapper	Plantain, banana	Platanilla (3), bijagua,

Table 8.5. Cacao Field of Bienvenido Cruz in Tonjibe, August 2000 (1 hectare)

(3) Number of varieties of the same crop or wild plant. * Domesticated species recently introduced.

Uses	Cultivated Species	Wild Species
Food	Banana (5), peach palm (7), avocado (3), orange, sweet lemon,* squash (2), coconut,* water apple,* tropical almond,* plantain (6), caimito, soursop, lime, mango, cacao (5), manioc (4), guineo (2), sugar cane, chili pepper (3)	Maquenque, kuchikuchiquípupa (liana), espavel, wild cane, sonzapote, zapote de mico, zapote (2), pacaya, nance, jobo, cacao silvestre (3), guava (2), yam (2), and guaba (3).
Food for wild animals	Peach palm, guineo, banana, plantain	Jobo, ojoche, guava, guaba
House-building materials		Guanacaste, laurel, quizarrá, lagarto, cedar, manú, plátano, madero de montaña, chaperno, guayabo de charco, plomo, gallinazo, corteza, aceituno, mangle, and guatil.
Roof thatch	Peach palm	Corozo and maquenque palms and platanilla
Arrow, bow, lance, machetes, digging sticks	Peach palm	
Household utensils	Jícara or guacal	
Bags and baskets		Pita or wild pineapple, Maóca
Stools		Laurel, cedar
Hammocks		Pita
Rafts		Balsa
Drums		Balsa, cedar
Chicha (alcoholic beverage)	Plantain, peach palm, manioc	
Drinks (non- alcoholic)	Cacao, plantain, sugar cane	Cacao silvestre
Firewood		Guácimo, platano, chaperno, lagarto, cucaracho, guatil, guabas
Medicine		Jobo, güitite, sulfatillo, soterre, zorrillo, jiñocuabe, frailecillo, huevos de caballo, caobilla, lagarto, cedro, gavilana, and rubber
Bark cloth		Mastate, rubber, chilamate
Necklaces and		Poró silvestre (seeds),
body ornaments		mastate, chilamate
Condiments	Chili pepper, achiote	Santa María
Make-up	Achiote	
God's offering	Cacao	Pataste
Fishing bait	Plantain, banana, cacao	Caobilla (seeds)
Light		Rubber (gum)
Wrap food	Plantain, banana	Bijagua, platanilla (2)

Table 8.6. Plantain Field of Francisco Elizondo in Tonjibe, August 2000 (1.4 hectare)

(2) Number of varieties of the same crop and wild plant species

* Crop species recently introduced. Agriculture species such as banana, plantain, guineo, and sugar cane were introduced sometime in the colonial period. As early as 1778 cultivation of these crops was reported on the Maleku territory along the Frío, Pataste and La Muerte Rivers.

8.4.1.2 Swidden Maize Cultivation

The swidden maize plots consisted of a transitory land use in which maize (*Zea mays*) was planted for at least two years followed by 8 to 10 years of fallow (natural regrowth). The Maleku created cornfields from second-growth forest areas by cutting the vegetation down, except trees and plants with some economic value. The cutting of vegetation was done using small stone axes and machetes made of peach palm wood (Carmona 1897:177; Sapper 1942:88). The cut vegetation was left to dry for two to three weeks and then burned. Planting in the relatively fertile ash residue began with the first rains of May. Three to four corn seeds were placed in holes made with digging sticks.

During the first planting of the year (May) corn was the dominant crop. However, in the second planting (November) the monoculture maize plots became polyculture gardens since maize and other crops such as manioc, squash, tiquisque, plantain, banana, cacao, chili pepper, sugar cane, peach palm, avocado, and other perennial fruit trees were planted in the same field following the first harvest. After the last harvest of maize was collected (second year), the cornfield was practically abandoned or left fallow, but still continued providing food products for two or more years.

As the fallow plots turned into secondary forest new valuable vegetation appeared. Species of wild platanillas (*Heliconia sp.*), fruit trees such as wild cacao (*Theobroma sp.*), wild papaya (*Carica sp.*), guaba (*Inga sp.*), guava (*Psidium guajava*), hog plum (*Spondias mombin*), maquenque palm (*Socratea durissima*), zapote (*Pouteria sapota*), nance (*Byrsonima crassifolia*), and many other forest trees developed. Various wild animals such as paca, white-lipped peccary, collared peccary, agouti, monkeys, and bird populations were attracted to the regrowths because their principal foods were produced there in a sustained supply. Apparently, after eight or ten years of natural regeneration the old fallow plots were under secondary forests, and their soil fertility restored, and once again they were ready for cultivation (Cruz, Elizondo, and Cruz 2000:pers.comm.).

The maize plots were not bigger than half hectare. Roasted cobs were eaten during the harvest season (September and January) and some kind of tamale was prepared with corn dough (Sapper 1942:91). Tortillas were unknown, and I believe the tamal idea was adopted from the Nicaraguan colonists between 1890 and 1900. Maize was also used to prepare *chicha*, an alcoholic beverage used in their festivities. The maize plots were located not far away from the dwellings, usually surrounding or between plantain and cacao fields. Proximity to the dwellings was vital to protect the corn from wild animals such as parakeets, parrots, coatis, raccoons, squirrels, and white-tailed deer (Elizondo E. 2000:pers.comm.).

8.4.1.3 Agricultural Calendar

The Maleku agricultural activities were determined by seasonal changes in rainfall. The Río Frío region does have a marked dry season, but rains decreased beginning in February and lasting until the beginning of May. The rains gradually increase in frequency and intensity from May to August, reaching their highest peak in July. Rains again decrease in September but rapidly increase reaching their second highest peak at the end of October and continue until February when starts the dry season.

According to the local investigators, the agriculture cycle began in April with the cutting of old fallow plots (old regrowth sites) for planting (Table 8.7). The cut vegetation, brush, and trees, were left lying in the ground to dry thoroughly for two to three weeks, and then, burned a few days before the onset of the rains on May. Planting begins immediately after the first rains and continues for about one month, usually during the month of May. The crops planted at this time include corn, banana, plantain, manioc, tiquisque, cacao, peach palm, dasheen, and sugarcane. Weeding of the fields took place from June to July. In August green corncobs were collected to roast and prepare tamals. Harvesting the dry corncobs occurred at the beginning of September.

The agricultural system called for a second planting period in November. So, the remaining days of September and October were devoted to clear the recently harvested maize fields, and to weed and clean the cacao and plantain planted in May. No new fallow or secondary forest plots were prepared for cultivation. Maize planting took place in former cornfields while planting in the cacao and plantain fields consisted of replacing species destroyed by wild animals, diseases, or floods, and introducing new crop species. In this

way, the Maleku increased the density and diversity of crops, and maintained different stages of crop production in the same plot. Weeding of these plots began in December and lasted through January.

Activity	Month
Clearing and cutting secondary forest (old fallow plots)	April
Burning dry cut vegetation (plant debris)	April
Planting maize, plantain, banana, cacao, manioc, peach palm,	May
ayote, tiquisque, ñampí, sugar cane	
Weeding agricultural fields	June-July
Harvesting mature corncobs, ayote	August
Harvesting dry corn*	September
Clearing recent harvested cornfields. Weeding cacao and	September-
plantain plots	October
Second planting of maize, plantain, banana, manioc, tiquisque,	November
peach palm, cacao, sugar cane	
Weeding corn fields	December
Begin harvesting manioc, ñampí, tiquisque*	January
Harvesting mature corncobs	February
Begin harvesting plantain, banana, sugar cane+	
Weeding cacao and plantain fields	March-April
Begin a new agricultural cycle with clearing, cutting, and	April
burning new secondary forest plots and cornfields	-

Table 8.7. Annual Cycle of Agricultural Work

* Manioc, yam, and tiquisque are left in the ground and may be harvested at any time during the months after they have matured.

+ Plantain, banana, and sugar cane are also harvested intermittently throughout the year according to household needs.

* They are brought to the house and prepared for storage by drying in the open air. Corn was stored on the cob and left unhusked until needed.

Manioc, yams, and dasheen were harvested in January; green corncobs in February, and plantain, banana, sugar cane, and dry corncobs in March. The major weeding of the cacao and plantain fields took place during March and April. The agricultural cycle began again in April with clearing, cutting, and burning new secondary forest fallow plots and recently harvested cornfields for the first major planting in May.

The labor arrangements for agricultural activities were of three types: division of labor by sex, exchange labor, and communal work. In terms of the division of labor by sex,

men did the clearing and burning of the new agricultural fields and most of the planting and weeding. Women did most of the harvesting and transport of harvested crops (Carmona 1897:165; Thiel 1927:154). *Chichada and mano vuelta* were the two types of exchange labor systems practiced by the Maleku, as described above.

8.4.2 Hunting

Hunting game was one of the most important subsistence activities practiced by the Maleku. The hunting of wild animal species such as mammals, birds, and reptiles provided the Maleku with a large part of their animal protein needs. Among the mammals, whitelipped peccary (*Tayassu pecari*) was the most desirable prey, followed by paca (*Agouti paca*), red-brown monkey (*Ateles geoffroyi*), collared peccary (*Tayassu tajacu*), and agouti (*Dasyprocta punctata*). Other game animals were nine-banded armadillo (*Dasypus novemcinctus*), coatí (*Nasua narica*), and kinkajou (*Potos flavus*) (Table 8.8). Among the birds, great curassow (*Crax rubra*), crested guan (*Penelope purpurascens*), and great tinamou (*Tinamus major*) were the preferred species. Other smaller birds such as oropéndola (*Psarocolius montezuma*), several species of toucans, green parrots, parakeets, green and scarlet macaws, and many other species were also actively hunted. Among the reptiles, iguanas (*Iguana iguana*) were killed for their meat, eggs, and skin, as well as a small terrestrial turtle called *tortuga montañera* (Cruz, Elizondo, and Cruz 2000:pers.comm.).

The Maleku were selective in terms of what animals they hunted for food. Traditional indigenous religion prohibited the consumption of some animals considered to be filthy, dirty, unhealthy, and injurious to human life since they incited people to behave badly and to disobey god's established rules of good behavior (Table 8.9).

Although hunting was a year-round activity, its frequency and intensity increased from February to April and August to September when the optimum hunting conditions generally occurred. The decrease of rains between February and April and again in August and September produced dry conditions, which made it easier for the hunters to move over dry ground but also on low-water rivers using balsa rafts. The seasonal ripening of fruits and

Spanish Name	English Name	Maleku Name	Scientific Name	
Mammals				
Ardillas	Tree squirrels	Culhá	Sciurius sp.	
Armadillo	Nine-banded armadillo	Lenhífa	Dasypus novemcinctus	
Chancho de Monte	White-lipped peccary	Ujúti	Tayassu pecari	
Danta	Tapir	Lhiquícas	Tapirus bairdii	
Guatusa	Agouti	Chúchu	Dasyprocta punctata	
Martilla	Kinkajou	Cúchi cúchi	Cúchi cúchi	
Mono colorado	Red spider monkey	Tiú	Ateles geoffroyi	
Pisote	Coatí	Púlhi	Nasua narica	
Saíno	Collared peccary	Conh	Orthogeomys cherriei	
Tepezcuintle	Paca	Cúri	Agouti paca	
Birds				
Cacique	Scarlet-rumped cacique	Querérequerére	Cacicus uropygialis	
Calandria	Rose-breasted grosbeak		Pheucticus ludovicianus	
Carpintero	Pale-billed woodpecker	Lhorróro	Pholoceaste guatemalensis	
Carpintero	Woodpecker	Chóchófa	Picumnus olivaceus	
Chachalaca	Chesnut-winged	Caélocaélo	Ortalis garrula	
Chorcha	Black-cowled oriole	Pintot	Icterus dominicensis	
Codorniz	Spotbellied Bobwhite	Chólhi	Colinus leucopogon	
Colibri	Hummingbirds	Pilhí	Trochilidae	
Gongolona	Great Tinamou	Lhúlu	Tinamus major	
Lapa verde	Great Gren Macaw	Aféla	Ara ambigua	
Lapa roja	Scarlet Macaw	Óla	Ara macao	
Lora	Parrot	Cosoqui suírra	Amazona farinose	
Lora	Parrot	Cosoqui suírra	Amazona autumnalis	
Martín Pescador	Green Kingfisher	Carécar	Chloroceryle americana	
Oropéndola	Montezuma Oropendola	Lhújo	Psarocolius montezuma	
Paloma	White-Fronted Dove	Túli	Leptotila verreauxi	
Pato real	Muscovy	Táro suírra	Cairina moschata	
Pava	Crested guan	Uru	Penelope purpurascens	
Pavón	Great Curassow	Túfi	Crax rubra	
Paloma perdiz	Ruddy Quail-Dove	Tónhor	Geotrygon Montana	
Perdiz	Perdiz	Lhúrirren	Crypturellus soui	
Perico cotorro	Crinsom-fronted Parakeet	Querráca querráca	Aratinga finschi	
Perico zapoyolito	Orange-chinned parakeet	Cosóqui	Aratinga nana	
Perico catano	Orange-fronted parakeet	Lhalaqui cosonh	Aratinga canicularis	
Sargento	Scarlet-rumped Tanager	Chicháúnha	Ramphocelus passerinii	
Tucán curré negro	Keel-billed toucan	Ocátuéju	Ramphastos sulfuratus	
Tucán cusingo	Collared aracari	Culhínhculhínma	Pteroglossus torquatus	
Tucán	Chestnut-mandibled toucan	Charalhtoc	Ramphastos swainsonii	
Tucán	Emerald toucanet	Tacárratacárra	Aulacorphynchus prasinus	
Tucán	Yellow-eared toucanet	Charalhtocó óra		
Reptiles		Charamoto ola	Bereinderd Speeddonis	
Iguana	Iguana	Erra	Iguana iguana	

Table 8.8. List of Important Animals Hunted by the Maleku in the Past

Sources: Cruz, Elizondo, and Cruz 2000:pers. comm.; Cruz J. 2000:pers. comm; Morera 2000:pers. comm; Pizarro 1998:24-78.

Common Name	English Name	Maleku Name	Scientific Name	
Mammals				
Comadreja	Weasel	Tururucutunh	Mustela frenata	
Conejo	Rabbit	Cófe	Sylvilagus floridanus	
Jaguar	Jaguar	Tafá	Panthera onca	
Mapache	Raccoon	Tiúinhanhe	Procyon lotor	
Mono congo	Howler monkey	Úriúri	Allouatta palliata	
Mono carablanca	White-faced monkey	Juanhaúnha	Cebus papucinus	
Caucel	Caucel	Tuectúenh	Felis wiedii	
Oso caballo	Anteater	Cuarunhífa	Myrmecophaga trydactyla	
Oso hormiguero	Anteater	Óron	Tamandua mexicana	
Perezozo	Two-toed sloth	Nharáchunh	Choloepus hoffmanni	
Perezozo	Three-toed sloth	Cúcula	Bradypus variegatus	
Perro de agua, nutria	River otter	Talháran	Lutra longicaudis	
Puercoespín	Porcupine	Junh	Coendou mexicanus	
Venado de cola blanca	White-tailed deer	Lhúri	Odocoyleus virginianus	
Zorrillo hediendo	Skunk	Támerréja	Conepatus semistriatus	
Zorro pelón	Opossum	Chíchi	Didelphis marsupialis	
Birds				
Aguila arpia	Harpy eagle	Móra	Arpia harpyja	
Aguila pescadora	Osprey	Lhuélhuéfa	Pandion haliaetus	
Buho	Great horned owl	Arárafá	Buho virginianus	
Cuyeo	Gavilan	Culhímoqui	Caprimulgus rufus	
Cigüenón	Wood stork	Nhoronh	Mycteria americana	
Garzas	Herons	Quépo	Tigrisoma sp.	
Garcetas	Egrets	Fo	Ardea sp.	
Aguilillo negro	Black hawk eagle	Lhijilhaifa	Spizaetus tyrannus	
Guaco	Laughing falcon	Nhúaco	Herpetotheres cachinnans	
Lechuza	Barn owl	Mucmuc	Tyto alba	
Jabirú	Jabiru	Quilhanquilh	Jabiru mycteria	
Pato aguja	Anhinga	Chóle chóle	Anhinga anhinga	
Cormorán neotropical	Neotropical cormoran	Chóle Chóle	Phalacrocorax brasilianus	
Rey zopilote	King vulture	Molhíja	Sarcoramphus papa	
Zopilote negro	Black vulture	Úrro suírra	Coragyps atratus	
Zopilote	Vulture	Úrro	Cathartes Burrovianus	
Zopilote cabecirrojo	Red vulture	Onherra	Cathartes aura	
Reptiles				
Caiman	Caiman	Maíqui	Caiman crocodilus	
Cocodrilo	Crocodile	Ujú	Crocodilus acutus	
Culebras	Snakes	Lhalánh	-	
Fish				
Tiburón	Freshwater shark	Lhérronca	Carcharhinus leucas	
Róbalo	Snook	Cájanh	Centropomus undecimalis	
Sábalo real	Tarpon	Lhíca	Megalops atlanticus	

Table 8.9. List of Animals Not Eaten by the Maleku in the Past

Sources: Cruz, Elizondo, and Cruz 2000:pers. comm.

seeds from February to April, and from August to September, attracted many game animals. In addition, the continuous production year-round of crops such as banana, plantain, cacao, manioc, ayote, and sugar cane, also attracted game animals to the cacao and plantain fields, located near the communities (Cruz, Elizondo, and Cruz 2000:pers.comm).

The Maleku sat up temporary hunting camps distant places during the dry season. Hunting camps were established on the Tenorio Volcano, the headwaters of major rivers such as Frío, Buenavista, Cote, Sabogal and Arenal, Cote and Caño Negro lagoons, along banks of the Frío, Buenavista, and Barbudero Rivers, and mouths of the Caño Negro, Caño Ciego, and Sabogal Rivers. The hunting trips to these places took several days and usually involved large groups of hunters from different communities. The Maleku also organized hunting trips to places located within a few hours walking distances from their palenques. Popular hunting sites were the headwaters of the Venado, El Sol, Cucaracha, La Muerte, and Pataste Rivers, as well as along the middle sections of the Río Frío, and mouths of the Cote, Venado, El Sol, La Muerte, Samen, and Buenavista Rivers. Usually these short hunting trips involved only a few hunters (three or four) who belonged to the same extended family or were clan-related members from the same community.

During the rainy season (May-July, October-January) hunting conditions were less favorable. The availability of food resources for the wild animals was more reduced and more widely dispersed. Thus, game species moved constantly around in search of food, which made them more difficult to hunt. In addition, heavy rains and bad weather increased the water levels of rivers, streams, and lagoons, and flooded a large part of the Río Frío lowlands. For this reason, most of the reduced hunting activities during the rainy season focused mainly on the middle and uplands of the Guanacaste Cordillera, river headwaters, and along elevated river banks, interfluves, and small hills in the lowlands. Other favorite hunting spots were the cacao and plantain plantations, cornfields, and fallow plots located near their palenques (Elizondo L. 2000:pers.comm.).

Among the Maleku, hunting was mainly a male activity and occurred in daytime only. However, women and children also participated in the hunting of armadillos, iguana, coati, agouti, and birds that occurred nearby their houses and on their agricultural plots. Women also accompanied men on long hunting trips. They cooked for the hunters and helped butchering preys, smoking the meat to preserve it, and carrying it back to their houses (Cruz J. 2000:pers.comm).

The Maleku used different hunting tools and techniques in the past. The most important hunting tools were the bow, arrow, and lance. They also developed different hunting methods according to the nature of the preys they wanted to capture: red monkey, kinkajou, paca, iguana, birds, and one particular method designed to capture multiple species at the same time. From the information provided by local investigators and written sources six hunting methods practiced by the Maleku around late 19th century were identified.

(1) The red spider monkey

Spider monkeys feed on fruits from trees such as jobo and ojoche. So, what the hunters did was to identify an isolated jobo or ojoche tree, and then, cut branches of neighboring trees, and connected it to another tree using a large liana. The next day, the hunters hiding in the vicinity waited for the arrival of the monkeys, who used the liana to reach the jobo or ojoche tree. Once the monkeys were busy eating fruits, the Malecu rapidly cut the liana leaving them isolated from the rest of the trees. The hunters used arrows and bows, spears, and sticks to kill the terrified monkeys hanging on the tree branches. The monkeys who managed to get to the ground were killed with sticks and wood machetes. Local investigators agree that hunters could have easily captured more than 20 monkeys in just one game adventure without expending a lot of time and energy.

(2) The kinkajou

The kinkajou's lair consists of a hole made in the wood of a tree trunk. This animal is a nocturnal, so one way to capture it was when sleeping during daytime. The hunters spotted a tree with a kinkajou lair, and then one person climbed the tree and positioned himself above the hole. In the ground, two or three people made a lot of noise by yelling and shouting and hitting the trunk tree with sticks. With all the commotion and noise, the kinkajou woke up, and its immediate reaction was to take its head out of the hole to see what was going on down in the ground. This move probed to be a fatal mistake for the kinkajou because the person located up in the tree, above the lair's hole, whom the kinkajou could not see, struck the kinkajou in the head with a stick, killing it on the spot.

(3) The paca

The paca usually lives in burrows in the ground. Like the kinkajou, paca is only active at night while in the daytime rests and sleeps. One particular characteristic of the paca's burrow is that besides an entrance-exit hole, it has also an emergency exit nearby, which is carefully disguised with leaves and twigs, and uses it to escape in case of an enemy attack. Once the hunters found a paca's burrow, they proceeded to install a large net-bag with its opening fitting the size and shape of the exit hole. Then, the hunters excavated in the main entrance-exit hole, and introduced long sticks to disturb the pacas, which got scared and tried to escape through the emergency exit, running directly into the net-bag trap. Using this hunting technique the Maleku captured pacas of all ages and sex. Baby pacas were not killed, they were taken back home alive and raised until they reached adulthood or were big enough to be killed for food (Elizondo E. 2000;pers.comm).

(4) The iguana

The Maleku developed a particular technique to capture iguanas directly on the trees where they spend most of their time. They cut a long four to five meter stick and looped a rope around one end. One man climbed a tree housing the iguanas and extended the stick to hook the rope loop around the iguana's neck. Then, he rapidly twisted the stick to tighten the rope. By the time the iguana tried to jump from the tree, it was already hanging up from its neck and somebody in the ground was ready to pick it up. This hunting technique is still practiced today by the Maleku.

(5) Holes or pit falls

Another particular technique to hunt wild animals was pit falls. The hole had a rectangular shape that measures one meter wide, between two and three meters long and three and four meters deep (Carmona 1897:184; Marín, Jaen, and Mojica 1996:14). They were strategically located next to each other, usually in pairs under ojoche and guaba trees, and on pathways used by some animals to move through the forest. In addition, at the bottom of the hole was set up sharp pointed sticks to make sure the falling animal hurt itself and had not chance to get out of the hole. These pit falls were used to capture collared peccary, white-lipped peccary, pacas, agouti, coati, armadillos, and birds such as curassow, crested guan, and tinamou.

(6) Birds.

The Maleku used three different techniques to catch birds. The first technique consisted of building a small temporal two-story thatch hut (1.5x 1.5 meters) next to a peach palm tree. The hunter sat in the second floor with a bow and arrow ready to shoot. The idea was to be as close as possible to the peach palm fruit bunches, where the birds stand up, without being noticed by them. The birds were visible to the hunter by a small hole made in the thatched roof through which the arrow stuck out. When the birds were busy eating peach fruits and unconcerned about their surroundings, the hunters shot them down. This hunting technique was effective with birds such as toucans, parrots, parakeets, red and green macaws, and chestnut-winged chachalaca.

The second technique to catch birds was the loop snare. In a specific branch of a tree, the Maleku hang up a bunch of peach palm fruits or plantains to attract birds. They set up a rope snare on the same tree branch holding the peach palm bunch. A person hidden in the ground was holding the end of the snare rope. When a bird stood on the branch and was busy reaching the peach palm fruits, the person in the ground pulled the rope as fast as possible (Marín, Jaen, and Mojica 1996:14). The third technique to catch birds consisted of a loop snare set up in the ground. The loop snare for catching birds was made by bending a sapling over, fastening it to a looped cord, and locking it with a release trigger. The looped

cord was covered with small sticks and leaves. This bird trap was placed under specific trees such as ojoche, jobo, guaba, and nance, which bear fruits eaten by birds and some mammals, and scattered along trails through agriculture fields. Although this trap was designed to catch birds such as curassow, great tinamou, crested guan, and small tinamou, other animals such as agouti, armadillo, and coati were also caught.

8.4.3 Fishing and Aquatic Hunting

The numerous rivers, streams, lagoons, and wetland (swamps and marshes) ecosystems support a very rich and diverse aquatic life. The Maleku collected valuable animal proteins from these water-related ecosystems through fishing and aquatic hunting. The most common fish species caught were bobo (*Joturus pichardi*), guabina (*Gobiomorus dormitor*), roncador (*Pomadasys croco*), barbudos (*Ramphia sp.*), pinto (*Porachromis managuensis*), guapote (*Porachromis dovii*), and several species of mojarras (*Cichlasoma sp.*), and sardines (*Characidae*) (Table 8.10). Like some game animals, the Maleku did not eat some water-related species for religious reasons. Among these species were tarpon, snook, fresh water shark, river otter, frogs (except for the pecpec frog), toads, caiman, crocodiles, and any species coming from the sea (See Table 8.9).

Fishing was confined to the months with the fewest rains - February to May and August-September, when the water levels of lagoons, rivers, and streams were low, shallow, and clear. During the remaining seven months of the year, the high amounts of rainfall resulted in the overflow of rivers and lagoons with muddy-turbid waters from upstream erosion that made fishing difficult (Elizondo N. 2000:pers.comm.).

In the traditional setting fishing occurred either near the palenque site or several kilometers away. Each palenque controlled sections up and down the river on which the palenque was located. This control over the river of residency meant use rights over its aquatic resources. Extended family households from the same palenque had two or three river pools properly identified and named. Fish were reportedly abundant in these family-owned river pools because fish were fed with guava, wild cacao's pulp, plantain, and cedar seeds (Cruz J. 2000:pers.comm.).

Spanish Name	English Name	Maleku Name	Scientific Name
Fish			
Barbudos	Catfish	Quilanh	Rhamdia sp.
Bobo	Bobo mullet	Járen	Joturus pichardi
Bobino o	Mountain	Lhejínare	Agonostomus monticola
machin	mullet		
Gaspar	Tropical gar	Sáfu	Atractosteus tropicus
Guabina	Guabina	Corocoron	Gobiomorus dormitor
Guapote	Guapote	Pátanh	Parachromis dovii
Mojarra	Mojarra	Ólajuálu	Cichlasoma sp.
Mojarra moga	Mojarra	Juálu	Cichlasoma sp.
Mojarra	Mojarra	Jaráran	Cichlasoma sp.
Mojarra	Mojarra	Nuíji	Cichlasoma sp.
Mojarra	Mojarra	Tárochayú	Cichlasoma sp
Mojarra cartera	Mojarra	Trujtaye	Cichlasoma sp.
Mojarrita	Little Mojarra	Taquirrún	Cichlasoma sp.
Mojarra	Mojarra	Pamáminá	Cichlasoma sp.
Olomina	Olomina	Múnhu	Poeciliidae
Olomina	Olomina	Lharíjaríya	Poeciliidae
Pinto	Guapote tigre	Tafanayi	Parachromis managuensis
Roncador	Drum	Áfo	Pomadasys croco
Sabalete	Sabalete	Lhíqui	Dorosoma chavesi
Sardina	Sardine	Taré	Characidae
dientona			
Sardina	Sardine	Púje	Characidae
Sardina	Sardine	Taquesúf	Characidae
Turtles			
Tortuga	Turtle	Ulíma	Chrysemis scripta
Tortuga lagarto	Turtle	Tenh	Chelydra serpentine
Tortuga	Turtle	Paparúnh	Kinosternon scorpioides
Tortuga	Turtle	Lhonh	Chrysemis ornate
Tortuga	Turtle	Chiquírrin	Kinosternidae
Tortuga	Turtle	Paunka curíja	Chelydridae
Crustaceans	Crab	Córa suírra	Occipode sp.
Cangrejo	Crab	Caecón	Occipode sp.
Cangrejo	Crab	Tarímon	Occipode sp.
Cangrejo	Crab	Panhijí córa	Occipode sp.
Langostino	River shrimp	Cúla	Macrobrachium sp.
Amphibians			
Rana	Frog	Pecpec	Leptodactylus pentadactylus

Table 8.10. Fish and Aquatic Species Captured by the Maleku in the Past

Source: Cruz, Elizondo, and Cruz 2000:pers.comm.

Fishing also occurred several kilometers away from the palenque site. The Maleku took a day-long fishing trip to nearby rivers such as Barbudero, Buenavista, Samen, Frío, Cote, Venado, El Sol, Cucaracha, and Caño Ciego. For more distant fishing sites such as the Cote and Caño Negro Lagoons, and down the Frío River, the fishing trips took several days either by water or on foot. In these places the Maleku built temporary thatched huts that would be used throughout the dry season (February to April, August-September). These fishing trips were also hunting trips since people from different palenques combined both activities at the same time.

Fishing was mainly a group activity. All family members (men, women, children, and elders) fished together, especially in nearby rivers and family-owned river pools. Fishing was also practiced by groups of women only, who could be either accompanied or not by their children. Trips that required several hours to get to the fishing grounds usually involved groups of men from the same palenque, which could include women too. Fishing trips lasting several days to distant rivers and lagoons usually involved 10 to 15 men from different palenques.

The local investigators identified at least seven different fishing techniques used by Maleku late in the 19th century.

(1) Hook and line was one of the most common methods for fishing. Fishhooks were made from animal bones, and lines from a fiber plant named pita (*Agave sp.*). As bait, the Maleku used worms and small sardines, cooked seeds of caobilla and ojoche trees, pataste's flesh, and small pieces of guava and plantain.

(2) Another fishing technique was the use of the bow and arrow. This type of fishing consisted of fishermen standing on the edge of the river armed with bow and arrows ready to shoot fish. Once the fish was hit, the fishermen jumped into the water to pick the wounded fish. Compared to the hunting arrows, the fishing arrows were longer, thinner and lighter. This kind of fishing was better in clear, slow motion waters, and river pools, which made it easier to spot the fish.

(3) One of the preferred means of taking fish was by striking them with spears. The spears consisted of straight, hard poles or sticks about two to three meters long with a sharp point in one end. The wood used to make the spears came from raphia and peach palm trees. The spear was simply thrown from river banks, or from platforms built by lashing logs horizontally across the river from where the fishermen had better sight and position to throw the spear into the still side pools of a stream.

(4) One of the simplest fishing methods was diving for fish. Young and adult men dove into large river pools looking for small holes or caves located in the vertical riverbank walls where the fish hide. Once the divers located such caves, they rapidly introduced their bare hands to grab any fish hidden in there.

(5) The Maleku used fish poisons to catch fish. At least two types of lianas known as cúriquirra (*Serjania inebrions*) and lhápara quirra (*Jacquinia aurantiaca*) were used (Marín, Jaen, and Mojica 1996:14). The fish poison was made by chopping the bark of these lianas and pounding it against rocks. The mashed bark was then strewn in small, shallow, and clear rivers and streambeds. The liquid substance produced by the mashed bark stupefied fish, which was easily collected with spears, net, or by hand.

(6) Another simple fishing method consisted of long straight hollow tree trunks of peach palm and maquenque palm. Usually the inner parts of old falling peach and maquenque palm trees rot relatively fast while their outer parts remain longer. The fishermen simply took the rot out of these palm trees. The light hollow tree trunks were thrown into river pools known for having great quantity of fish. People gathered around the river pool and made a lot of noise by shouting and hitting the water with sticks. The scary fish took refuge in the hollow tree trunks lying at the bottom of the river pool. Next, the fishermen covered both ends of the hollow trees to trap the fish hidden inside, and took the hollow trees out of the water to collect their catch of fish.

(7) One of the most common fishing methods during the dry season was the use of dip-nets. This type of fishing was more effective in small shallow lagoons and river pools and required the joint participation of several people, including women and children. Women and children formed a line on one side of the lagoon or river pool while men holding dipnets formed another line on the other side. The line of children and women walked toward the line of men making a lot noise shouting and hiting the water with sticks. So, the scary fish ran away from them in the direction of the line of men, trapping themselves into the dipnets.

Daniel Carmona, a priest who visited the Maleku palenques in 1896, described two more fishing techniques. He reported that the Maleku tied a small, thin stick to one end of the line, and then, put a small piece of plantain or caobilla seed on it as bait and wrapped it up with thin strings of mastate bark to affix it to the stick. The fisherman threw the line into the river and when the fish bit or swallowed the plantain, the fisherman pulled the line with such strong impulse that the fish simply flew out of the water and landed on the riverbank. Another fishing method consisted of placing ripe plantains on a large fishing net (dip-nets) that was then submerged into lagoons and river pools. When the number of fish eating the ripe plantain on the dip-nets was considered enough, the fishermen simply lifted up the net quickly, trapping some fish in the process (Carmona 1897:183).

The Maleku were also actively involved in aquatic hunting during the dry season. Freshwater turtles, whose meat was considered adelicacy, were the most important waterrelated species collected by the Maleku. The biggest and most valuable of the turtles, known as úlima and conh in Maleku (*Chrysemis scripta, ornata*), have their natural habitats in the Caño Negro lagoons, rivers, and wetlands (swamps, marshes). Other turtle species included the smallest one (chiquírrin), and broken chest (paparúnh), which were caught in rivers and streams, and two terrestrial species: tortuga lagarto (tenh) and paunhca cúrija.

During the dry season (March-April) groups of people from different palenques went down the Río Frío in balsa rafts to the Caño Negro Lagoon to hunt, fish, and principally to capture turtles. Up to 15 rafts made the trip carrying more than 75 people, including women and youngsters. The whole trip lasted more than three weeks. Along the Río Frío and Caño Negro lagoons the party sat up temporary camps, from where smaller groups of people organized short hunting and fishing trips. The meat and fish obtained throughout the trip was preserved by smoking it, and then stored in mastate bark sacks. Two or three days before returning back home, the Maleku engaged in capturing turtles in different lagoons of Caño Negro. After catching a large number of them and safely storing them in large bags, they initiated their journey back to their palenques. It took several days to travel up the Río Frío because the balsa rafts carried a heavy load of food and also because the rafts were not well suitable for navigating against the river current. So, the expedition established several resting and sleeping camps along the Río Frío. Once the party reached the palenques, the fish and meat was distributed among their relatives and friends, who had prepared a big celebration for the exhausted group (Acevedo 1986:52; Castro E. 2000:pers.comm; Marín, Jaen, and Mojica 1996:14; Morera 2000:pers.comm; Ugalde 1973:96-97).

Among amphibians, the Maleku hunted an edible frog, known as pekpek. It was caught in small lagoons and marshes during the months of May and June. In the middle and upper stretches of rivers and streams people regularly caught four different species of crabs, as well as langostinos or river shrimps.

8.4.4 Gathering

The collection of natural resources for subsistence use was an essential activity for the Maleku indigenous peoples. They collected a wide array of wild resources offered by local environments for multiple purposes: food, clothing, medicine, house construction, firewood, household furniture and utensils, music instruments, and fishing and hunting tools. The gathering of wild edible products high in food value formed a regular and dependable part of the indigenous diet, particularly during the months of March, April, September, and October (Table 8.11).

Another important activity was the collection of numerous wild plants and herbs for medicinal purposes. During his visits to the Maleku communities (1882-1896), Bishop Thiel and his companions reported that the indigenous peoples ignored the curative properties of many plants found in the area, and consequently, they did not use any of them to treat their diseases. These observations were far from the truth (Carmona 1897; Thiel 1896b; 1927). Indeed, the Maleku knowledge of medicinal plants was broad and diverse. They used a wide

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variety of medicines made from roots, lianas, herbs, leaves, barks, flowers, and seeds to treat numerous diseases (Table 8.12).

Common Name	Maleku Name	Scientific Name	Edible Parts	Harvest Period
Almendro de monte	Timáronh	Dipterix panamensis	Nuts, almonds	Sept-Oct
Bush	Jocoterracúru	-	Fruits	Aug-Sept
Cacao Silvestre	Cúja cajú	Theobroma sp.	Seeds	March-April
Granadilla de	Cámona	Passiflora sp.	Fruit and flesh	Mar-Apr-May
monte				
Granadilla de	Punkucháquírra	Passiflora sp.	Fruit and flesh	March-April
monte				
Guaba	Ujúpurúnaf	Inga sp.	Seeds and flesh	March-April
Guaba	Nhurucaticúru	Inga sp.	Seeds and flesh	March-April
Guaba	Tiúija inhanhe	Inga sp	Seeds and flesh	March-April
Guatil	Póli	Genipa americana	Fruits, seeds	March-April
Jobo (Hog plum)	Lhúru	Spondias mombin	Seeds	April
Liana	Nharisin quirra quirra	-	Seeds	Aug.
Liana	Quicúru	-	Fruit	Oct
Liana	Chiquitárenh	-	Beans	Oct
Liana	Chacha cúru	-	Fruit and flesh	Oct
Maquenque (palm)	Lherréfa	Socratea duriisima	Palmito, flower	Year-round
Nance	Córa cúru	Byrsonima crassifolia	Fruit	Sept-Oct
Níspero	-	Manilkara spectabilis	Fruit	Mar-Apr-May
Name Silvestre	Túcuru	Dioscorea sp.	Tuber	Sept-Oct
Ojoche	Cújo	Brosimum sp.	Fruit, seed	May
Pacaya (palm)	Cuctinh	Chamaedora sp.	Flower, palmito	Aug
Palm bush	Caronh	-	Fruit, palmito	Year-round
Palm bush	Lhúronh	-	Palmito, flower	Aug
Papaya de monte	Catonh	Carica sp.	Fruit, stem, roots	Sept-Oct
Papaya de monte	Julúri	Carica sp.	Fruit, stem, root	Aug-Oct
Pataste	Erréfa	Theobroma bicolor	Fruit, seeds	Aug-Sept
Pejibaye de monte	Lhíjupuru	Guilielma utilis	Fruit, seeds	Sep-Oct
Tamarindo	Tonh	Dialum guianense	Fruit	May
Santa María	Cuínhon	-	Leaves	Year-round
Liana	Cuchicuchiquipupa	-	Seeds	July
Zapote	Cafáta	Manilkara sapota	Fruit	Sep-Oct
Zapote	Cúritú	Pouteria sapota	Fruit	Sep-Oct
Zapote de mico	Nharitunh	Couroupta nicaraguensis	Fruit	Sep-Oct
Sonzapote	Aluti	Licania platypus	Fruit	Sep-Oct
Yolillo	Lhúrri	Raphia taedijera	Fruit	Mar-Apr-May
Palm tree	Juriricúro	-	Palmito, flower	Year-round
Guayaba	Otérra	Psidium guajava	Fruit	Year-round
Espavel	Tilhpá	Anarcadium excelsun	Nuts, fruits	March-April
Wild peach palm	Lhúma córa	Guilielma sp.	Fruit, palmito	Sept-Oct

Table 8.11. Wild Plants Collected for Food Purposes

Sources: Castro L. 2000:pers. comm.; Cruz, Elizondo, and Cruz 2000:pers. comm; Elizondo L. 2000:pers. comm; Marín, Jaen, and Mojica 1996:12-13.

Common Name	Maleku Name	Scientific Name	Medicine Uses
Aceituno or olivo	Quinhitunh	Simarouba glauca	Bark. Intestinal parasites, diarrheas,
			fever, amebas
Alcotán (herb)	Cafánka	Baccharis trivernis	Leaves and root. Toothache, fever
Ajillo (herb)	Jérren	Petiveria alliacea	Root and leaves. Fever, cold, and flu,
TIX. de este	Culturing	D main line	rheumatism, sinusitis, asthma, cough.
Uña de gato	Culhácajon Turríman	Byttneria aculeata	Liana. Cancer, tumor
Camíbar (tree)	Turriman	Copaifera aromatica	Latex or milk. Itch, scabies, skin ulcers and wounds, papalomoyo
Caña agria	Chacáronh	Costus sp.	Root, stem. Kidney pain and inflammation, ear inflammation
Caobilla (tree)	Ajáran	Carapa guianensis	Bark. Foot fungus, footsore
Cedro real (tree)	Tali	Cedrella odorata	Bark. Headache, dizziness, vertigo, skin
	10000		diseases (boil, abscesses), waist and
			backaches, purify blood. Rheumatism,
			arthritis
Maquenque	Jerréfa	Socratea durissima	Skin swelling
Cucaracho	Aróron	Billia colombiana	Bark.
Cucumeca		Smilax sp	Root. Anemia, blood purifier, invigorate
Culebro	Lhápara	Galipea granulosa	Bark. Diabetes
Gavilána	Coquírron	Neurolaena lobata	Leaves. Diarrhea, stomach tonic,
			amebas, gastric-intestinal pain, stomach
			disorder, malaria, stomachache
Hombre grande	Cáon	Quassia amara	Bark. Diabetes, dizziness, appetite,
			stomachache, purgatives, laxative, bites
			of scorpions and spiders
Hortiga	Totonh	Cyperus sp.	Body aches, Fever, cold, flu
Huevos de Caballo	Chóre	Ficus sp.	Latex or milk. Skin ulcers (boils,
			abscesses), stomach worms
Hule	Quírri	Castilla elastica.	Latex and seeds. Headaches, foot and
	m ::/0		toes wounds, irritations
Indio pelado	Tejéfen	Bursera simaruba	Bark. Skin irritations, wounds, and ulcers
			(boil, abscesses), stomach ulcers, indigestion and disorders
Lagartillo (tree)	Nháfinh	Zenthousdon measure	Bark. Toothaches
Liana	Mututukutiaquirra	Zanthoxylon procerum	Eye treatments
Coralito (bush)	Pilichon	Hamelia patens	Skin ulcers, boil, abscesses, rash
Raicilla (root)	riticiion	Psychotria ipecacuana	Root. Toothaches, stomachache
Raíz de India		r sycholina ipecacuana	Root. Toothaches, anaesthesia
Rancallo	Nhíjon		Prostate, cough
Saragundí	Inition	Cassia reticulata	Leaves and flower. Itch, scabies,
Salagunui		Cassia leticulata	laxative, arthritis, rheumatism, herpes,
			venereal diseases, psoriasis
Zarzaparrilla		Smilax sp.	Root. Diabetes, kidney pain and
Laizapannia		опшал эр.	inflammation, anemia, blood purifier,
			rheumatism, diarrhea, dysentery

Table 8.12. Some Wild Plants Collected for Medicinal Purposes

Sources: Cruz, Elizondo, and Cruz 2000:pers.comm; Morera 2000:pers.comm.

Table 8.13 contains the most important wild plants gathered by the Maleku in the past and the different ways in which they used them. At least 29 different uses were identified for the collected materials, including the construction of houses, the confection of clothes, the elaboration of household utensils, agricultural, hunting, and fishing tools, and many more valuable uses.

Uses	Common Name	Maleku Name	Maleku Name
Roof thatch	Suita	Turímonh	Geonoma longesta
	Chonta	-	Astrocaryum stantleyanum
	Maquenque	Jerréfa	Socratea durissima
	Corozo	-	Welfia georgii
	Yolillo	Lhúrri	Raphia taedijera
	Bijagua	Kinhafúro	Calathea insignis
	Platanilla	Punhí	Heliconia sp.
	Pacaya	Cuctinh	Chamaedora sp
House-building materials	Manú	Cholhilenhin	Vitex cooperi
House-building materials	Cachá	Cholimentin	Pithecolobium sp.
	Fruta dorada	Jarábonh	Virola sebifera
	i i uuu uui uu		
	Tempisque	Cúlu	Syderoxylon capiri
	Cedro	Tali	Cedrela odorata
	Laurel	Pú	Cordia alliodora
	María	-	Calophyllum brasiliense
	Caobilla	Ajáran	Carapa guianensis
	Gasparillo	-	Allophylus psilospermus
	Bejuco de hombre	Cáonh	Anthurium scanders
	Bejuco negro	-	Mostera sp.
	Mangle	Ojon	Bravaisia integerima
	Plátano	Tilhon	Caryocar costaricense
	Chaperno	Jurulenhin	Lonchocarpus macrophyllus
		Lhála	Terminalia oblonga
	Guayabón, sura		U
	Guayabo de charco	Aóca	Terminalia bucidoides
	Guatil	Póli	Genipa americana
	Gallinazo	Táfan	Schizolobium parahyba
	Madero de montaña	Lhijilon	Lemmea viridiflora
	Corteza	Lhajárra	Tabebuia sp.
Firewood	Cucaracho	Aróron	Billia colombiana
	Pechipán	Tilhují	Bunchosia cornifolia
	Culebro	Lhapára	Galipea granulosa
	Tempisque	Cúlu	Syderoxylon capiri
	Costilla de danto	Nhúac-Nhúac	Lecointea amazonica
		Nháfinh	
	Lagarto		Zanthophylum procerum
	Guácimo	Lharúrunh	Guazuma ulmifolia
	Guaba	Purunaf	Inga sp.
	Guaba	Ujúpurunaf	Inga sp.
	Guaba	Tiúlha inhanhe	Inga sp.
Hammocks and beds	Pita (leaves)	Yújanh	Agave sp.
	Burío (bark)	Porélenh	Heliocarpus appendiculatus
	Mastate (bark)	Chólhi	Brosimun utile
	Hule (bark)	Quírri	Castilla elastica
	Bijagua (leaves)	Kinhafúro	Calathea insignis
	Platanilla (leaves)	Punhí	Heliconia sp.
		and an end of the second of	
	Plantain (leaves)	Lhúli	Musa paradisiacal
Low wooden stools	Cedro	Tali	Cedrela odorata
	Laurel	Pú	Cordia alliodora
Eating-drinking utensils	Jícara (gourds, fruit)	Pupa	Crescentia cujete
	Calabazo (gourd, fruit)	Quirrúmun	Crescentia alata
Baskets	Bejuco de hombre	Cáon	Anthurium scanders
	(liana)	Maóca	-
	Maóca (leaves)	Lhúma	Guilielma sp.
Page	Pita (leaves)	Yújanh	Agave sp.
Bags			
	Burio (bark)	Porélenh	Heliocarpus appendiculatus
Make-up	Achiote (seeds)	Lhó	Bixa orellana
	Guatil rojo (seeds)	Catálhin	Simira maxonii
Bark cloth	Mastate (bark)	Chólhi	Brosimum utile
	Chilamate (bark)	Conh	Ficus sp.
	Hule (bark)	Quírri	Castilla elastica

Table 8.13	. Wild Plants	Collected by	Maleku fo	r Different	Uses in the Past
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Uses	Common Name	Maleku Name	Scientific Name	
Headdress	Mastate (bark)	Chólhi	Brosimum utile	
	Pava (feathers)	Úru	Penelope purpurascens	
	Pavón (feathers)	Túfi	Crax rubra	
Bows and arrows	Wild pejibaye (bark, wood)	Lhijupuru	Guilielma sp.	
	Pejibaye (bark, wood)	Lhúma	Bactris sp.	
	Caña brava (veroliz)	Túja	Gynerium sp.	
	Caña brava (veroliz)	Áfan	Gynerium sp.	
Digging stick, machetes,	Wild pejibaye (wood)	Lhijupuru	Guilielma sp.	
axes	Pejibaye (wood)	Lhúma	Bactris sp.	
Fishing spears	Wild pejibaye	Lhijupuru	Guilielma sp.	
	Pejibaye	Lhúma	Bactris sp.	
	Yolillo	Lhúrri	Raphia taedijera	
Fishing nets, lines	Pita (leaves)	Yújanh	Agave sp.	
	Burío (bark)	Porélenh	Heliocarpus appendiculatus	
	Bones (anzuelo)			
Fishing bait	Pataste (fruit, flesh)	Erréfa	Theobroma bicolor	
0	Caobilla (fruit)	Ajáran	Carapa guinensis	
	Guayaba (fruit)	Otérra	Psidium guajaba	
	Plantain (fruit)	Lhúli	Musa sp.	
Bird snares	Pita	Yújanh	Agave sp.	
en a sharts	Burío	Porélenh	Heliocarpus appendiculatus	
Rafts	Balsa (logs, trunks)	Piúju	Ochroma pyramidale	
Kalts	Burío (bark)	Porélenh	Heliocarpus appendiculatus	
		Cáon	Anthurium scanders	
N	Bejuco de hombre (liana)		Cedrela odorata	
Musical instruments	Cedro (log)	Tali		
	Balsa (log)	Piúju	Ochroma pyramidale	
	Carriso (cane)	Arafúfu	Chusquea sp.	
	Iguana (skin)	Erra	Iguana iguana	
	Armadillo (conch, skin)	Lenhífa	Dasypus novemcinctus	
Wrapping food material	Bijagua (leaves)	Kinhafúro	Calathea insignis	
	Platanilla (leaves)	Punhí	Heliconia sp.	
	Hoja de cherenga (leaves)	Chúchu aru	Heliconia sp.	
	Platanilla (leaves)	Chom chom	Heliconia sp.	
Condiment	Achiote	Lhó	Bixa orellana	
	Chile	Tuéju	Capsicum sp.	
	Santa María	Cuínhonh	-	
	Guatil rojo	Catálhin	Simira maxonii	
Fish toxic	Liana	Cúri guírra	Serjania inebrions	
	Liana	Lhápara quírra	Jacquinia aurantiaca	
Ceremonial beverage	Cacao	Cajú	Theobroma cacao	
	Pataste	Erréfa	Theobroma bicolor	
God offerings	Cacao	Cajú	Theobroma cacao	
Goa oner mga	Pavón	Túfi	Crax rubra	
	Cariblanco	Ujúti	Tayassu pecari	
	Pataste	Erréfa	Theobroma bicolor	
Buriolo				
Burials	Mastate (bark) Pavón (feathers)	Chólhi	Brosimum utile Crax rubra	
		Túfi		
	Pava (feathers)	Úru Aféla Óla	Penelope purpurascens	
	Guacamaya (feathers)	Aféla, Óla	Ara ambigua, macao	
	Carriso	Arafúfu	Chusquea sp.	
	Achiote	Lhó	Bixa orellana	
	Cola de gallo	1.	Bactris pubescens	
	Culebro	Lhapára	Galipea granulosa	
	Pechipán	Tilhují	Bunchosia cornifolia	
Fighting sticks	Jicarito	Tufáronh	-	
Protector: sun and	Cacao (seeds)	Cajú	Theobroma cacao	
mosquitoes	Pataste	Erréfa	Theobroma bicolor	
Lighting	Rubber (gum, latex)	Quírri	Castilla elastica	

Table 8.13. Continued

Sources: Cruz, Elizondo, and Cruz 2000:pers.comm; Castro L. 2000pers.comm; Castro E. 2000:pers.comm.

8.4.5 Animal Husbandry

The raising of forest animals for food played a significant role in Maleku's past subsistence. Young and baby wild animals such as parrots, macaws, toucans, parakeets, curassow, crested guan, chachalaca, tinamou, squirrels, white-lipped peccary, collared peccary, agouti, paca, and spider monkeys obtained during hunting and fishing trips were raised until they were old enough to be eaten. Some parakeets, parrots, and squirrels might had been exempted of being killed and eaten after growing up, perhaps for ornamental and sentimental reasons. The only domesticated species raised by the Maleku was the stingless native honeybee that was kept in houses. This stingless honeybee known as *mariola* bee was placed in a big gourd hanging from the beams or roof rafters to encourage the bees to produce honey inside the houses (Cruz, Elizondo, and Cruz 2000:pers.comm). This strategy to obtain honeybee is still practiced by some families of El Sol community.

The Maleku subsistence depended on the combination of several food-getting strategies adapted to the availability of biotic resources and environmental conditions. The plantain and cacao fields provided most of their sustenance, supplemented with meat procured from hunting and fishing. From February through middle of May and from middle of August through middle of October food resources were generally more diversified and widespread, so the Maleku spent most of their time hunting, fishing, gathering, and farming. Conversely in the rainy season due to heavy rains, bad weather, and flooding conditions food resources were more limited in quantity and kinds, so fishing was difficult, hunting and gathering activities reduced, and agricultural supplies were not overly abundant. The Maleku maintained food supplies during the rainy season through food preservation and storage. Large holes dug in the ground contained turtles caught in the Caño Negro lagoon for weeks. Efforts also focused on meat preservation that spoils rapidly in the humid climate if not eaten quickly. If the amount of meat to be preserved was small it was cut in strips and smoked over the fireplace. In the case of larger quantities of meat and fish, they were placed on a frame above a slow fire, so the flesh was simultaneously smoked, dried, and partially cooked. Smoked fish was preserved for at least three months (Cruz, Elizondo, and Cruz 2000:pers.comm).

The most important agricultural products preserved were pejibaye, maize, and cacao. Pejibaye, an important staple food and used for making *chicha*, was preserved for several weeks through the smoking and sun-drying processes. Cacao seeds were dried in the sun and store in mastate sacks for weeks until needed. Maize was also dried in the open air and stored on the cob and left unhusked until needed. Although tuber and roots crops were available and harvested at any time of the year, they were also stored for some period of time.

Finally, the Maleku developed other means of securing food over the year. This customary meant the reciprocal exchanges of foodstuffs among a palenque families, and the interchange of food products and *chicha* celebrations at the inter-palenque level. These traditional methods of redistribution were important to give families access to food that was in short supplies, especially during the rainy season (Local investigators 2000). By focusing in different food-getting strategies in different places and at different times of the year, along with the development of different food preservation methods and reciprocal exchanges of labor and foodstuffs, Maleku families were able to have access to food throughout the year.

9. How and Why the Maleku Changed Between 1868 and 1900

The commercial extraction of natural rubber and the Catholic missionary incursions on the Río Frío watershed during the last three decades of the 19th century marked the beginning of a long process of cultural-geographical change of Maleku society that continues today. This chapter documents the geographical, demographic, and cultural transformations experienced by the Maleku between 1868 and 1900, examining the factors causing the changes.

9.1 The Maleku and the Nicaraguan Rubber Gatherers, 1868-1900

The demand for natural rubber increased worldwide as a result of the discovery of the process of vulcanization in 1839 by Charles Goodyear, the invention of the pneumatic tire in 1888 by John Boyd Dunlop, and the rising of the automobile industry in the United States in the 1900s (Barlow 1978:16; Le Bras 1969:13; Polhamus 1962:23).

Until the beginning of the 20th century, tropical forests of South America and Central America supplied virtually the whole amount of natural rubber (Table 9.1). Rubber from Central America entered the market in the 1850s as earlier competitors of the South American product, and the isthmus held second position among world rubber producers until the rise of the African industry in the 1890s. The expanding production of *Castilla* rubber in Central America due to price booms resulted in the exportation of 1,675 tons in 1880, doubling the exports from 1870. However, in 1890 the exports of rubber began to decline slowly to produce only 100 tons in 1910, despite the continued increases in rubber prices. The Central America rubber production was markedly on the downward trend even before the plantation rubber from Southeast Asia rose to dominance in 1913. Two aspects contributed to the decline of rubber exports from Central America. Firstly, the *Hevea* rubber from the Amazon region was preferred over the *Castilla* rubber because of its superiority in terms of strength, elasticity, and lower percentage of non-rubber constituents, which commanded higher prices (Polhamus 1962:62; Simmons 1921:18). Secondly, the frequent and excessive bleeding of rubber trees and a collection system that included cutting down

the trees, contributed to the reduction of the population of rubber trees (Conzemius 1984:107; Wolf and Wolf 1936:53).

Year	Wild Rubber		Plantation Rubber	Total	Average Yearly Price (U.S. Dollars)	
	South American	Central America	Africa	Asia		
1836	186				186	0.05
1840	381				381	
1850	1,440	160			1,600	
1860	2,618	382			3,000	.618
1870	6,500	816			7,316	.987
1880	8,525	1,675			10,200	.850
1890	16,102	898			17,000	.838
1900	27,784	774	15, 526	821	44,905	.982
1905	34,634	639	18, 585	2, 499	56, 357	1.243
1910	62, 891	100	20, 143	11,000	94, 134	1.908
1912	62,052		24, 581	32,100	118, 733	1.12
1915	46, 318		8,138	115,600	170,056	.557
1918	31, 501		7, 121	184, 400	223, 022	.549
1920	30, 486		6,402	316,600	353, 488	.363

Table 9.1. World Production and Shipments of Crude Rubber (tons), 1836-1920.

Sources: Drabble 1973; Clemen 1924; Barlow 1978; Dubosc and Luttringer 1918; Wolf and Wolf 1936

Central America was always a minor player in the rubber world economy. Nicaragua, by far the largest exporter, never came close to exporting one million dollars worth of rubber in a year (Schoonover 1991:71). The San Juan River region was one of the most promising rubber zones in Central America, where the principal species of rubber trees exploited were *Castilla elastica* and *Castilla costarricana* (Pittier 1910:249, 272). The rubber activity started in 1850 and lasted until 1913, when prices dropped and production from rubber plantations in South East Asia dominated the international market. The trade centers for this rubber and also for most of that derived from northern Costa Rica were San Juan del Norte, El Castillo, and San Carlos of Nicaragua. The only statistics available, which are incomplete, show that exports of rubber from the port of San Juan del Norte increased from 401,475 pounds valued at 112,413 dollars in 1867 to 754,886 pounds valued

at 226, 465 dollars in 1871 (Belt 1911:29). Pablo Lévy, a French geographer, estimated that rubber exports in 1871 from the ports of El Castillo, San Juan del Norte, San Juan del Sur, and Corinto reached 885,652 pounds, which yielded 260,193.60 dollars. This amount represented 20 percent of the total Nicaraguan income for exports (Lévy 1976:410).

From San Juan del Norte, El Castillo, and San Carlos of Nicaragua parties of men received canoes and provisions on credit from merchant-rubber exporters, many of them North American, to travel upriver, far into the forests of the Caribbean slope (Belt 1911:29). Usually a rubber dealer supplied a group of about five to eight rubber gatherers with the necessary gear and supplies to stay in the forest for at least three months. The provisions included firearms, blankets, machetes, axes, pans, pails, and buckets. The rubber gatherers bound themselves before local authorities to deliver the product at a fixed price. They were expected to bring the rubber they obtained to the merchants who had fitted them out, but many proved faithless and carried off their produce to other towns. One rubber gatherer could make up to \$1000 in each expedition to the forest (Belt 1911:30; Bovallius 1977:200-20; 11993:93-95).

After the discovery of a great number of rubber trees on both banks of the Río Frío by the expedition of Captain Parker in 1868, Nicaraguan rubber gatherers began to ascend the Río Frío. The initial success in draining the *Castilla* species was a signal for a rush up the river by other parties (Wolf and Wolf 1936:52). Various parties were organized to ascend the Río Frío that was a common occurrence after 1868. San Carlos of Nicaragua became the rubber trade center, where the rubber gatherers were fitted out with canoes and provisions and from here they started their expeditions up the Río Frío and other Costa Rican rivers (Belt 1911:34).

The expansion of the commercial rubber activity into the Río Frío watershed inevitably led to the confrontation between the native population –usually very protective about their way of life, territory, and resources- and the rubber gatherers. Unfortunately, such confrontation resulted in the near extermination of the indigenous peoples. Local informants and historical sources agree that an important battle took place at La Muerte River in 1868. Several hundreds of Maleku men armed with spears, arrows, and bows battled a small but better-armed party of rubber gatherers with firearms, machetes and dogs, which tragically ended with hundreds of Maleku men killed, including their chief warrior *Urojua*. Some prisoners, along with the body of their dead chief warrior, were taken to San Juan del Norte where they were displayed like war trophies. The prisoners were given away to landlords located along the San Juan River and in the port of San Juan del Norte. Since that battle, the river has been known as Río La Muerte (River of the Death), and the decimated Maleku remained victims of the rubber gatherer's actions (Figueroa 1885a:24; Frantzius 1925:229; La Gaceta 1882:1276; 1882:1302; 1882:1306; 1882:1311; Thiel 1896a:13; 1896b:69,73).

Once the native opposition was eliminated, the rubber gatherers carried out harmful actions against the defenseless indigenous population. They stole foodstuffs, house utensils, tools and handicrafts from the communities, raped women and killed whoever tried to stop them. The rubber gatherers also captured men and forced them to serve as unpaid bearers in the forest. The native residents, who were able to escape from the rubber gatherers, deserted their houses and ran into the forest and mountain slopes leaving their houses, crops, food, and belongings. There, without food and shelter, exposed to heavy rains, high humidity, cold nights, diseases, malnutrition and the numerous poisonous snakes, many people, especially children perished (Carmona 1897:151-152,190; Cruz, Elizondo, and Cruz 2000:pers.comm.; La Gaceta 1882:1273; 1882:1301; 1882:1312; Thiel 896a:14,21; 1927:30,118-120).

The rubber gatherers also persecuted and enslaved the native population, particularly young men and women, and took them to Nicaragua. The excuse for stealing and taking these youngsters to Nicaragua was to be baptized and made Christians (Belt 1911:35). However, there were people in Nicaragua interested in buying them to be used as hacienda's peons and household domestic servants. Thus, the Nicaraguan rubber gatherers started a new lucrative activity, a slave trade, despite the fact that all slavery in independent Central America had been abolished since 1832.

Bishop Bernardo Thiel and ten more members, who participated in the first expedition to the Maleku territory in 1882, visited Nicaragua as well. They witnessed the

slave trade taking place in the towns of San Carlos, El Castillo, and Granada, where Maleku men and women were sold for as slaves. They reported more than 60 slaves in San Carlos, around 50 to 60 in Granada, and many more in other towns such as Rivas, León, Managua, San Juan del Sur, El Castillo and San Juan del Norte (Carmona 1897:137,142; Fernández 1882:675; La Gaceta 1882:1276; 1882:1280; 1882:1281; 1882:1282; 1882:1283; 1882:1285; Thiel 1896b:69,73; 1927:17,38-39,119). The ex-president of Nicaragua himself, Pedro Joaquín Chamorro, had bought three young Maleku men from rubber gatherers to work on his hacienda in Granada, and two more had even been taken to New York (La Gaceta 1882:1284; 1882:1302). The number of Maleku prisoners taken to Nicaragua by 1882, according to Bishop Thiel, was about 500, of which half perished of diseases and maltreatment (Thiel 1896a:13-14; 1927:17). In addition, members of the expedition of 1882 and some Maleku themselves gave fully testimonies of the maltreatment and sufferings experienced by the Maleku as prisoners of the rubber gatherers and as slaves in Nicaragua¹.

Marc Edelman (1998:380) makes an interesting observation about the nationality of the rubber gatherers. He questioned that all the rubber gatherers in the Guatuso territory were Nicaraguans, and argued that Costa Rica rubber gatherers were also involved in this activity. Although the Maleku oral story and historical information overwhelmingly identify the rubber gatherers as Nicaraguans, I agree with Edelman that Costa Ricans, more probably from the Guanacaste region were also engaged in the collection of natural rubber on the Maleku territory. Rubber from the species Castilla nicoyensis was gathered by itinerant rubber gatherers in Guanacaste, Costa Rica. By the turn of the 19th century, rubber became scarce, and probably some rubber gatherers might have crossed the Guanacaste Cordillera into the Río Frío watershed looking for Castilla rubber trees. In his first trip to the Maleku territory in 1882, Bishop Thiel brought a rubber gatherer who knew about the trails and bypasses used by the Maleku. I believe this person was Costa Rican, not Nicaraguan. In addition, Thiel reported in 1884 that Maleku men carried rubber from their palenques to Las Cañas, Guanacaste in exchange for some iguanas that the rubber gatherers (most certainly Costa Ricans) promised to hunt for them (ACM 1896c). Most likely Costa Ricans collected rubber in the Río Frío region, however, the question that deserves an answer in a future investigation is the following: Were Costa Rican rubber gatherers also involved in the enslavement and trade of the Maleku indigenous peoples?

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9.2 The Impacts of the Nicaraguan Rubber Gatherers' Actions

The collecting of natural rubber on the Río Frío watershed by the so-called Nicaraguan rubber gatherers had profound effects on the Maleku society and the environment. One of the most unfortunate was the decimation of the native population. Before the arrival of the rubber gatherers in 1868, the indigenous population ranged between 1500 and 2000 people. According to the demographic data collected by Bishop Bernardo Thiel in 1896, the native population had been reduced to only 267 people (Carmona 1897:218; Thiel 1896b:92; 1927:151). The significant population decline in a 28-year period testified the difficult conditions experienced by the Maleku at the hands of the rubber gatherers. The indigenous peoples' loses accounted for: (a) those killed in battle opposing the rubber gatherers actions, (b) those captured and sold as slaves in Nicaragua, (c) those held prisoners by the rubber gatherers who succumbed to the maltreatments and diseases before being sold as slaves, (d) those who fell victims of the introduced Old World diseases, and (e) those who perished in the forest and mountains getting away from their captors.

The historical records give little attention to the introduction of new diseases as one of the causes that decimated the indigenous population. The Maleku were described as healthy, tall and robust in 1882, and few recent burials were found inside their houses (Fernández 1882:677; La Gaceta 1882:1279; 1882:1280). However, 14 years later the situation had changed completely. The Maleku were described as very thin and weak, sick-looking, and suffering from mortal pulmonary diseases, measles, smallpox, typhoid, influenza, tuberculosis, fevers, cough, sores, ulcers, anemia and lice infections (ACM 1896d; Carmona 1897:135,213,168; Sapper 1942:89; Thiel 1927:115,149-150). According to the population census conducted by Bishop Thiel in 1896, there were about 330 recent burials on the eleven surviving communities compare to the 267 people still alive. Alcoholism and suicide was very common among the Maleku (Montero 1892:200). Thus, the introduction of non-existent diseases probably by the rubber gatherers and the Catholic missionaries took their toll on the native population.

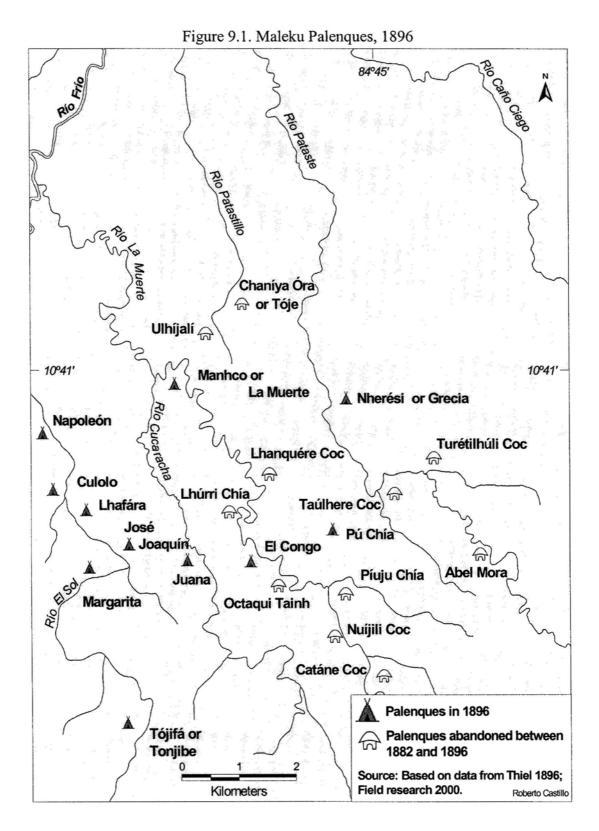
Concomitant with the decline in population, there was also reduction in the number of palenques and the relocation of some of them. By mid-19th century the Maleku lived in

about 17 palenques located alongside the Pataste, Patastillo, and La Muerte Rivers, with probably more palenques situated on the Caño Ciego River and some of its tributaries (Table 9.2). In an attempt to escape from the rubber gatherers raids and abuses, the Maleku abandoned almost all the ancestral palenques located on those four rivers, except Nherési or Grecia, Pú Chía, Manhco or La Muerte, and El Congo. Their residents went southwest, toward the slopes of the Guanacaste Cordillera, and along the Cucaracha and El Sol Rivers establishing seven new palenques: Tójifá or Tonjibe, Margarita, José Joaquín, Lhafára, Culolo, Napoleón, and Juana (Figure 9.1).

Palenques 1850s	Palenques 1896	Palenques 1899
Pataste River	Pataste River	Pataste River
Nherési or Grecia	Nherési or Grecia	Nherési or Grecia
Turétilhúli Coc	-	-
Taúlhure Coc	-	-
Abel Mora	-	-
Lharúruqui Chá	-	-
Patastillo River	Patastillo River	-
Pú Chía	Pú Chía or San Juan	-
Chaníya Óra or Tóje	-	-
La Muerte River	La Muerte River	La Muerte River
Manhco or Mango	- Manhco or La Muerte	Manhco or La Muerte
Lhúrri Chía	-	-
Lhanquére Coc	-	-
El Congo	- El Congo	-
Octaqui Tainh	-	-
Piúju Chía	-	-
Nuíjili Coc	-	-
Catáne Coc	-	-
Lherréqui Chía	-	-
Ulhíjali Stream		
Ulhíjali	-	-
-	El Sol River	El Sol River
-	Tójifá or Tonjibe	Tójifá or Tonjibe
-	Margarita	Margarita
-	José Joaquín	Pedro Jeréz
-	Lhafára	Lhafára
-	Culolo	Nicolás
-	Napoleón	-
-	Cucaracha River	Cucaracha River
-	Juana	Juana

Table 9.2. The Abandonment and Relocation of Palenques, 1850s-1899	Table 9.2.	The Aband	lonment and	Relocati	on of Pal	lenques,	1850s-1899
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Sources: Carmona 1897; Cruz, Elizondo, and Cruz 2000:pers.comm.; Sapper 1942; Thiel 1896b; 1927.



It is uncertain when exactly the abandonment and exodus took place. However, during his third expedition to the region in February of 1884, Bishop Thiel visited the palenques of Tonjibe and Margarita, and met with people from the other five neighbor palenques at Margarita (ACM 1896b). This suggests that the new seven palenques on El Sol and Cucaracha Rivers had been established before 1884. By 1896 only eleven palenques survived and three years later when the German geologist Carl Sapper visited the area, three more palenques, Pú Chía, El Congo, and Napoleón had been abandoned (Sapper 1942:92-93).

The Nicaraguan rubber gatherers seriously affected the Maleku livelihood since they narrowed and diminished important subsistence areas such as the Caño Negro Lagoon, and rivers such as Frío, Buenavista, Samen, La Muerte, Pataste, Patastillo, Caño Ciego, Purgatorio, Sabogal, small tributaries and lagoons. These rivers were also the main venues used by the rubber gatherers to travel within the region and to reach the indigenous habitations. The Maleku avoided these water-related environments and surrounding areas, but by doing so, they gave up prime residential, hunting, fishing, and agricultural areas. During the dry season, the Maleku navigated up and down the Río Frío using balsa rafts and organized long hunting-fishing trips to the Caño Negro lagoon. Unfortunately, this river was also the main artery used by the rubber gatherers to travel from and to Nicaragua, and the Caño Negro lagoon was one of the favorite sites for the rubber gatherers to set up their temporal camps. The Maleku were forced to develop their subsistence activities in areas located to the south, on the slopes of the Guanacaste and Tilarán Cordilleras, particularly the headwaters and middle stretches of the rivers. Thus, unable to make such fishing-hunting trips down the Río Frío and to the Caño Negro lagoon, the Maleku lost one of the most important source areas of animal food, which contributed to their malnutrition and vulnerability to new introduced diseases.

The territorial domain of the Maleku was not only reduced by the rubber gatherers' actions but also by the permanent colonization by foreigners. The presence of the rubber gatherers on the Río Frío paved the way for the colonization of the area by foreign colonists. By 1882, several Nicaraguan immigrants had already settled the site known as Lagunas de Chile (present-day Los Chiles) (Figure 9.2) located next to the Río Frío and about 6 miles



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up from its mouth in Lake Nicaragua (Thiel 1896a:24). By 1896, seven Nicaraguan families, one Costa Rican family, and seven North American individuals belonging to a Protestant Church lived on the Río Frío or Guatuso². The head of the Costa Rican family was Juan Alvarez, a retired soldier who came in 1882 to protect the Maleku from the rubber gatherers (La Gaceta 1882:1309). He decided to stay in the area and grow coffee, cacao, and rubber trees. Unlike the rubber gatherers, the Nicaraguan families established their permanent residences on both sides of the Río Frío and their livelihood depended on growing maize, rice, beans, and cacao (Carmona 1897:199). Although the Nicaraguan colonists lived relatively close to the Maleku palenques, there is not written or oral evidence of unfriendly encounters between them. Nonetheless, the newcomers appropriated fertile lands, and hunting and fishing grounds belonging to the indigenous peoples.

In 1895, seven U.S. missionary protestants, one woman and five men, came to the Guatuso area from Philadelphia sponsored by the Bible Institute Society of Philadelphia and the Bible Union of Chicago. Their intention was to establish a religious community with more incomers from the United States, to develop agriculture projects and convert the Maleku indigenous peoples into their religious faith (Philadelphia Times, November 30, 1895, cited by Carmona 1897:203-204). They entered the country through Nicaragua, and apparently did not have permission from the Costa Rican government to settle in the area. In addition, by the end of the 19th century another Nicaraguan colony was established right on the edge of the Caño Negro lagoon, which was one of the most important areas of the Maleku for fishing, hunting and catching turtles.

The demographic decline caused by the rubber gatherers' actions, especially of young women and children taken to Nicaragua, resulted in an indigenous population predominantly dominated by adult males. It is important to notice that the males practically doubled the number of females and children separately. In addition, a large proportion of the male and female adult population was composed of elders, and most of the children were boys (ACM 1896d; Carmona 1897:218; Thiel 1896b:92; 1927:151). This particular demographic condition became a serious obstacle for the Maleku population to reproduce in the following years, and led to social disruptions, particularly to changes in traditional marriage rules. The type of marriage practiced by the Maleku was monogamy, but

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apparently the lack of female partners seemed to have contributed to the practice of polyandry by the end of the 19th century (Sapper 1942:90), meaning a woman with more than one husband or mate at the same time. In addition, according to local informants men and women, who were maternal or paternal cousins, began to marry among themselves breaking a long cultural rule, which did not allow marriages between such close relatives (Elizondo L. 2000:pers.comm.). These marriage changes, however, might have helped the Maleku to ensure their future reproduction and survival.

In terms of the environmental consequences, the way the rubber activity was carried out in the Río Frío and other parts of the San Juan River region led to the destruction of the *Castilla* rubber trees. Some writers and scholars denounced that rubber trees died after being tapped because of its frequent, irrational and excessive exploitation, especially in the northern part of Costa Rica. There were no restrictions upon the rubber gatherers and trees of all ages and sizes were ruthlessly bled, many of which never recovered (Bovallius 1993:95; Fradin 1898:39; Lévy 1976:412; Pittier 1901:252). According to Belt (1911:30) and Conzemius (1984:30), one of the most devastating collection systems used by the rubber gatherers was to cut down the trees in order to facilitate the extracting process. These authors do not describe how the latex was actually extracted, but report that it was possible to get up to 100 pounds of rubber from big trees using this method. Thus, gradually the big trees. The destruction of the rubber gatherers turned to small and young *Castilla* rubber trees. The destruction of the rubber trees also affected the Maleku as well since they provided material for clothes, medicines, lighting, and favorite game animals such as parrots, monkeys, coati, collared peccary, agouti, and paca fed on their fruit's pulp.

Some unsuccessful efforts were made to stop the destruction of rubber trees. Nicaragua approved a law on July 1860, which fined those people who killed a rubber tree in order to obtain its latex (Lévy 1976:412). Costa Rica also approved a Decree in May 1882 banning the exploitation of rubber, timber, and other forest products from the northern region of Costa Rica without the government's permission (La Gaceta 1882:1272; Meléndez 1957:33). In addition, Costa Rica made an official complaint to the government of Nicaragua about the illegal extraction of rubber from the northern forests of Costa Rica by Nicaraguan rubber parties, who in the process were destroying the trees that produced such

latex (La Gaceta 1882:1273). These laws and regulations looked good on paper, but they were never enforced. It was difficult to enforce them in isolated, remote, forest areas, so, further destruction continued until most of the *Castilla* trees were gone.

9.3 The Maleku Met the Costa Rican Catholic Missionaries, 1882-1896

The German-born priest, Bernardo Augusto Thiel (1850-1901) became the second Bishop of Costa Rica in 1880. He was particularly concerned about unassimilated indigenous peoples still living in outlying regions of Costa Rica. So, shortly after his election as Bishop, he began a series of missionary expeditions to visit the communities of the Bribri and Cabécar indigenous peoples of Talamanca and Chirripó, and the Boruca and Térraba of the South Pacific region. He became a popular Bishop known by his constant missionary work of bringing unassimilated indigenous peoples into the civilized Christian world and the Costa Rican dominant culture (Sanabria 1982:580; Valenciano 1903:355).

Bishop Thiel learned about the precarious situation of the Maleku from Colonel Concepción Quesada, whose family had a hacienda in the outlying settlement of San Carlos. Colonel Concepción Quesada was informed about the abuses committed by the Nicaraguan rubber gatherers against the Maleku, and in 1869 he entered the Río Frío region from the slopes of the Tenorio Volcano, but never made contact because he was attacked and quickly withdrew (La Gaceta 1882:1276). In 1881 León Fernández, a lawyer and historian, met a young Maleku man named Santiago in Alajuela, who had been stolen by a Nicaraguan rubber gatherer when he was still a child. He introduced the Maleku man to Bishop Thiel, who decided to organize an expedition to the Maleku communities, using Santiago as interpreter (La Gaceta 1882:1301; 1882:1308).

Bishop Bernardo Thiel organized five expeditions into the Maleku territory between 1882 and 1896: 1) April 13-May 3 1882, 2) June 9-19 1882, 3) January 26-February 1 1883, 4) February 7-13 1884, and 5) February 25-March 4 1896. During the first expedition, the party was able to find several Maleku palenques alongside the Pataste, Patastillo, La Muerte and Caño Ciego Rivers. The discovery of the palenques was attributed to the support of the interpreter, Santiago Fernández, and the "ironic" collaboration of a rubber gatherer who knew the area. Although the expeditionary group reached some of the indigenous habitations, they were unable to contact their residents. As soon as they approached the palenques, their inhabitants fled into the forest, probably believing the intruders were Nicaraguan rubber gatherers (Céspedes 1923:67; La Gaceta 1882:1277; 1882:1278; Thiel 1896a:15,19; 1896b:314).

On the tenth day, the party apprehended a Maleku man while he was fishing on the Pataste River, and another had been seized by the rubber gatherers with the intention of selling him in San Carlos of Nicaragua, but turned him over "voluntarily" to the explorers. There was hope of having contact, through the prisoners as Thiel described them, with the rest of the indigenous population. However, they refused to take strangers into their communities, arguing that their own people would have beaten them to death with sticks. The captive men confirmed through Santiago, the interpreter, the slavery, stealing, mistreatments, and killings performed by the rubber gatherers against their people (Gabb 1883:316-317; La Gaceta 1882:1279; 1882:1280; Thiel 1896a:21-22; 1927:30-31). The two Maleku captives were taken to San José to be "educated" and used as guides and interpreters in future incursions into the area.

After spending two weeks in the area, the explorers became convinced that it was impossible to use the captive men to reconnoiter the Maleku communities, so they decided to return to San José. However, Bishop Thiel and ten members of his party, including León Fernández and Colonel Concepción Quesada traveled down the Río Frío to visit Nicaragua, hoping to find some Maleku stolen and sold by the rubber gatherers. As mentioned before, it was during this trip to Nicaragua that Bishop Thiel and his companions witnessed the slave trade taking place in San Carlos, Granada, El Castillo, and other towns of Nicaragua. During this trip, Bishop Thiel exhorted residents of San Carlos to turn over some Maleku slaves, so that he could educate them as missionaries, and then, use them to catechize the rest of the indigenous population. Bishop Thiel brought a young Maleku man and a woman and her baby back to Costa Rica (La Gaceta 1882:1284; 1882:1285; 1882:1303; Thiel 1896a:29; 1927:44).

In June of 1882, Bishop Thiel made his second visit to the Maleku communities, accompanied by the Maleku individuals he brought from Nicaragua. With their collaboration, the first successful contact between the Maleku and Bishop Thiel was finally established on June 14, 1882. The Maleku's fear and distrust was minimized with gifts such as machetes, hatches, shovels, rice, beans, necklaces, mirrors, and clothes; with the guarantee that Costa Rican soldiers would be sent to protect them from the rubber gatherers; and with the promise that if they learned to use fire arms, they would receive some to defend themselves (ACM 1896a; La Gaceta 1882:1297; 1882:1298). Thus, by presenting themselves as the good Samaritans, protectors and saviors, the missionaries slowly began to be trusted by the frightened Maleku.

In January 26-February 1, 1883 Bishop Thiel returned to the Río Frío region with his interpreter Santiago for the third time. They visited eight palenques and their time was dedicated to ease the fear and distrust the Maleku still had for the missionaries, and to convince them that they would be well-treated if they visited the interior towns of Costa Rica (ACM 1896b). The persistent Bishop Thiel came back in 1884 and 1896 (ACM 1896c, 1896d). Unlike past visits, the Maleku had already accepted the presence of the missionaries. The friendlier relation and better communication with the Maleku allowed Bishop Thiel to make observations on their culture, language, religion and subsistence activities. His 1896 final visit was particularly productive in terms of the ethnographic observations, the population census, and the description of the remaining communities.

9.4 The Missionary Expeditions and Their Effects on the Maleku

The missionary expeditions led by Bishop Thiel produced different impacts on the Maleku society. The contributions of the conquest-missionary expeditions toward the physical survival of the Maleku are discussed first, and then, the geographic and cultural changes caused by the missionaries' activities.

One of the most important contributions of the missionary expeditions was the reduction of the rubber gatherers actions against the native population. Firstly, Bishop Thiel was instrumental in persuading the Costa Rican government to approve the Decree No. 14

on May 27 1882, which prohibited the persecution of indigenous peoples and the removing of them from their territories (La Gaceta 1882:1272; Meléndez 1957:33). The government even made a request to the Nicaraguan government that all the Maleku sold in Nicaragua be allowed to return to their homeland, and that the Nicaraguans who persecuted and enslaved Maleku people of Costa Rica should be brought to justice (La Gaceta 1882:1273; 1882:1291). Secondly, responding to the petition of Bishop Thiel, the Costa Rican government sent some policemen to protect the Maleku from the rubber gatherers. On July 5, 1882 about 40 policemen commanded by Captain Juan Alvarez arrived in the region and established a police post in Guatuso (La Gaceta 1882:1309). It is unclear how long they remained in there, but when the Bishop visited the area in 1896 no policemen were around. That same year the government sent again some police to the region, but when Carl Sapper visited the region in 1899 only one police remained in Guatuso (Sapper 1942:84). Thirdly, during his visit to Nicaragua on May 1882, Bishop Thiel personally denounced the Maleku slave trade to the President of Nicaragua, Joaquín Zavala, and requested him to stop the human traffic that was going on at different locations in Nicaragua. He told President Zavala that he intended to sue the rubber gatherers before the Nicaraguan government if it was necessary (La Gaceta 1882:1284; 1882:1302). Finally, he also tried to persuade residents of San Carlos and El Castillo to turn over some Maleku slaves (La Gaceta 1882:1285; 1882:1303).

Despite Thiel's missionary and lobbying efforts to end the genocide and abuses from the rubber gatherers as recently as 1896 it was reported that two Maleku men were killed, two more were wounded with machetes, with women raped, men forced to work, and house utensils and crops stolen by the Nicaraguan rubber gatherers (ACM 1896d; Carmona 1897:152,205; Thiel 1896a:13; 1896b:73,88). However, no cases of Maleku taken to Nicaragua were reported, which suggests that the slave trade had ended by 1896. By the end of the 19th century, the rubber gatherer attacks and abuses had also ceased, most likely attributed to the presence of a permanent police post in Guatuso, to the decline of the rubber activity, and to the decimation of the population of rubber trees.

Remarkably, Bishop Thiel's nearly single handed efforts reduced the genocide and abuses from the Nicaraguan rubber gatherers and helped save the Maleku from a possible

physical extermination. The indigenous peoples welcomed missionary contact as a chance to end enslavement and to gain valuable gifts. However, by doing so, the Maleku were relinquishing their socio-cultural and political independence. Bishop Thiel's expeditions marked both the end of an era of physical extermination and the beginning of a new era of acculturation and assimilation into the dominant national culture. The Catholic Church was very proud to be the first bringing the abandoned Maleku indigenous peoples into civilization and the first eliminating from Costa Rica the barbarism and savagery.

The presence of the Catholic missionaries among the Maleku also caused several sociopolitical and cultural changes. They were responsible for bringing the Maleku into the cash economy as a way to obtain outside products. Bishop Thiel himself encouraged the Maleku to sell their cacao to his servant administrator in San José (See Figure 7.1). The money was used to buy machetes, axes, shovels, clothes, blankets, firearms, mashes, salt, cooking utensils, and other commodities (Carmona 1897:151; La Gaceta 1882:1299). The desire for such commodities created the need for the cash to purchase them.

The missionaries also brought new crop species such as rice, beans, and potatoes and farming tools such as machetes, axes, hatches, shovels, and clubs. They taught the Maleku how to clean their plantations and clear new land for agriculture using these tools, as well as how to cultivate the new crops (Carmona 1897:143,149,177,184; La Gaceta 1882:1299). The traditional wood machetes, digging sticks and stone axes were replaced by the metal tools, which made it easier and faster to cut trees, and clear more land for farming purposes. However, the incentive to cultivate more land was not only for subsistence reasons, but also for commercial purposes. Following Thiel's advice the Maleku began to cultivate more cacao, tobacco, cotton, rice, beans, maize, and peach palm. Small surpluses were sold in San José, Cañas, and San Carlos to buy commodities (La Gaceta 1882:1298). The intricacies of an economy based on cash as a medium of exchange slowly began to permeate the Maleku system of barter and reciprocal exchange of goods and labor. For the missionaries, commercial agriculture was the best way for the Maleku to improve their life.

One of the first influences on the native population was the introduction of Western clothes. According to the missionaries, the Maleku wearing their traditional skirts and

loincloths, headdresses, necklaces, long hair, and bodies covered with red paint and cacao oil, had a very savage and carnivorous appearance. Thus, in order to discourage and eliminate their habit of nudity and to change their look into a more "civilized" one, the missionaries supplied the Maleku with traditional Western clothes: pants, skirts, shirts, underwear, hats, necklaces, handkerchiefs, shoes and combs (Carmona 1897:150,162,167-168,188; La Gaceta 1882:1299). Culturally unaccustomed to wear the new clothes, the Maleku failed to change their clothes or washed them. They bathed in their clothes and wore them continuously until they were ragged (Carmona 1897:148).

By 1896, rifles introduced by the missionaries started to become the most important hunting tools used by the Maleku, replacing traditional hunting techniques, which involved the use of bows and arrows, pit falls and many other methods. In the same way, the metal hook became the most frequent fishing tool utilized by the Maleku, to the detriment of the ancestral fishing methods (Carmona 1897:184).

The missionaries found some Maleku customs contrary to their own principles of morality or civilization. One of these was the cultural prohibition, influenced by religion, of eating specific wild animals such as deer, rabbit, howler monkey, raccoon, tarpon, and many others. Another practice was the drinking of different types of *chicha*, alcoholic fermented beverage made of maize, peach palm, manioc, and plantain. According to the missionaries, the Maleku drank too much of their "disgusting" *chichas* daily (Carmona 1897:181,193). Another cultural practice was the stick fights to solve disputes and to punish wrongdoers. The Maleku were allowed to hit each other on the head with sticks so long the beating did not result in deaths. Such cultural customs were considered to be "stupid and barbaric" by the missionaries, and although, they had no power to forbid them, they tried to persuade the local people to give up their practice, without acknowledging their real nature and the role they played in Maleku's life (La Gaceta 1882:1298).

There are two actions carried out by Bishop Thiel and company, which clearly demonstrated the conquest and evangelizing nature of the expeditions. First, it was the replacing of Maleku place-names for Spanish and Christian names such as Santiago, Domingo, Rafael, Sotero, Joaquín, Concepción, Juana, and so on. Second, as evidence of the appropriation of a new geographical space, Bishop Thiel gave the palenques, rivers, streams, and other geographical features Spanish names imposing themselves on this territory and its native people. Despite his relative knowledge of the Maleku language, Bishop Thiel totally disregarded the indigenous toponomy.

The presence of Costa Rican police in Guatuso, thanks to the petition of Bishop Thiel, helped reduce and mitigate rubber gatherer attacks and raids, but their presence had also undesirable effects on the indigenous population. According to local investigators, the Maleku suffered abuses from the police. They interfered with local customs such as the preparation and drinking of *chicha*, the stick fights for solving disputes and punishing wrongdoers, and the chichada celebrations (music, dance, drink, and food). The police actions are still alive in the memory of the Maleku. Several local leaders described in 1996 "how their grandparents and parents suffered the humiliation of passing hours and days in holes in the ground with stocks on their feet, which was the punishment imposed by the first police authorities on the Maleku for practicing their culture" (Blanco et al. 1996:4). Similar to what happened with the rubber gatherers, the Maleku also hid in the forest as the soldiers approached their palenques, and did not come out of it until after the soldiers had left the place (ACM 1882a). What Bishop Thiel could not banish by persuasion, the police tried to do by force. Thus, the police supposedly sent to protect the Maleku, became also an instrument of social-cultural disruption, and probably an agent for spreading new diseases into the indigenous peoples.

Language and religion, two of the most important Maleku cultural elements, were little affected by the missionary activities. As late as 1882 when Bishop Thiel made his first expedition to the area, the Maleku did not speak Spanish at all, except for his interpreter Santiago. Fourteen years later, they reportedly spoke only a few Spanish words (Carmona 1897:135). Ironically, Christian indoctrination failed and the language barrier was probably the major obstacle for the visitors to teach the Catholic religion precepts. Although Bishop Thiel collected an extensive vocabulary and understood a little bit of the native language, he was unable to carry out a conversation, so he relied on Santiago, his interpreter in the first three expeditions, and Domingo, his interpreter in the fourth and fifth visits. Both Santiago and Domingo, stolen by rubber gatherers and taken to Nicaragua when they were children, had problems speaking and understanding their own language. Therefore, Bishop Thiel was unable to communicate his ideas of Catholicism because his interpreters "could not explain it very well" (La Gaceta 1882:1298). Another reason the Maleku language and religion remained very much intact was the absence of permanent religious missionaries among the Maleku. Bishop Thiel's visits lasted only a few days and Catholic priests from Cañas or San Carlos ventured to visit the Maleku communities only sporadically.

The evangelizing missions of Bishop Thiel not only attempted to bring the unassimilated Maleku into the "civilized" Christian world, but to help integrate an isolated and peripheral border region into the rest of the country. The incorporation of the Río Frío watershed into the rest of the country was essential since this border region was very much in dispute between Costa Rica and Nicaragua because of the San Juan River's potential as an inter-oceanic transport and canal route. In addition, the Liberal governments (1870-1889) regarded this region as important for the expansion and development of commercial activities such as banana, cattle, coffee, cacao, rubber, forestry, and mining.

Bishop Thiel considered the Maleku "new sons given to the nation who will contribute with their hands to exploit the lands that were, in a way, foreign to the very nation" (ACM 1882c). He strongly believed that the faster and easy way to Christianize and civilize the Maleku was by colonizing their territory with settlers from the country's Central Valley. So, his lobbying efforts before the Costa Rican government focused on the accomplishment of this particular objective. To attract the attention of the Costa Rican people toward the Río Frío region, Bishop Thiel described it as terra incognita with magnificent forests and fertile soils waiting to be exploited. He insisted on the high fertility of the region for planting commercial crops such as coffee, manioc, bananas, rubber, cacao, wheat, sugar cane, maize, beans, tobacco, rice, cotton, and cattle activities. He also emphasized the riches of the forests for extracting many valuable products such as medicinal plants, latex, oils, textile plants, dye materials, wood, skins and feathers, which would increase the national wealth and make happy many families from the Central Valley who lacked land to cultivate. He also considered that the Río Frío River should be used as the natural route to colonize and to transport products out of this region since this river

could be easily navigated with small commercial steamers and large boats (ACM 1896d; Carmona 1897:132-134,224-225; La Gaceta 1882:1286; Thiel 1896b:64-65; 1927:45).

Thiel requested the Costa Rican government to establish a colony in the Maleku territory, to contribute to the expenses of his expeditions, and to send two priests to civilize the indigenous peoples (La Gaceta 1882:1291). His strategy consisted of establishing a large hacienda next to the Maleku communities that would have domestic animals and crops unknown to them, so the native population could learn the value of the new productive activities. In addition, the missionaries could have a place to initiate the religious indoctrination of the indigenous population (La Gaceta 1882:1299). Bishop Thiel also suggested the need to open a road between San Carlos and Liberia, passing through the Maleku communities. He argued this road was necessary to transport cattle to central Costa Rica, and would encourage people to settle in the rich and extensive plains of the Río Frío, making the civilization of the Maleku easier (ACM1882b; La Gaceta 1882:1299).

The government of Costa Rica, following Thiel's petitions, passed some accords and decrees promoting the colonization of the region and the civilization of the Maleku indigenous peoples. Firstly, the Costa Rican government paid Bishop Thiel for the cost of his 1882 expedition (Gaceta 1882:1300). Secondly, the government donated to Colonel Concepción Quesada, Bishop Thiel, and León Fernandez for their work in the "conquest" of the Maleku and their rich territory, 10 caballerías of land on the Guatuso territory at the place they selected, except for those lands already cultivated or cleared by the native population. So, they could establish productive haciendas, and at the same time, teach the Maleku people how to cultivate (La Gaceta 1882:1319; Meléndez 1957:35). Thirdly, in 1883 the Costa Rican government approved money to provide financial help to the first settlers. The colonists "supposedly" had the mission "to teach with their practices and examples the cultivation of the lands and the good customs of the Costa Rican domestic life to the Maleku" (Meléndez 1957:36). Finally, in 1885 the government approved the establishment of a colony in the Guatuso territory. José María Figueroa, who was part of the first expedition in 1882 was elected as the most suitable person "to colonize and educate the Maleku in the practices of work and in the discipline of the law" (Meléndez 1957:37).

There is no evidence, as far as I know, that Concepción Quesada, Bishop Thiel or León Fernández ever took possession of their respective land donations. However, in August 19, 1882, Ramón Quesada, who participated in the first expedition, suggested to Thiel a place on the Pataste River to take his 10 caballerías of land (ACM 1882b). The Costa Rican government elected José María Figueroa to colonize the Guatuso territory. He attempted to establish a colony in June 1885, but failed. Among the reasons reported by Figueroa were the difficult access to the region by land or water, the heavy rains, and especially the flooding conditions of the area. He literally wrote that: "this region can only be colonized by building the houses on top of rafts" (Figueroa 1885b:27-28).

In summary, despite suffering considerable demographic decline, socio-cultural disruption, and territorial reduction during the last three decades of the 19th century, the Maleku were still physically and culturally alive starting the 20th century. Except for the economic involvement on a small scale, the unwelcome encounters with Costa Rican policemen and Nicaraguan colonists, and the sporadic visits of Catholic priests, the Maleku remained relatively isolated and little affected by the outside world. The difficult climatic and physical conditions of the region, the ill-fated construction of the Nicaraguan inter-oceanic canal, and the death of Bishop Thiel in 1901 might have prevented the development of colonization and missionary projects in the area, and eventually the further acculturation of the Maleku. Finally, the fact that the surviving Maleku were able to maintain control over some important tracts of lands and natural resources contributed enormously to their survival.

¹ Among the people who gave testimony before the Costa Rican authorities about what they saw in the trip to Río Frío region and Nicaragua in 1882 were: Bishop Bernardo A. Thiel; León Fernández in charge of the scientific part of the expedition; José María Figueroa in charged of the geographic issues of the expedition; Raymundo Hernández, an Indian from Tucurrique, Turrialba; Francisco Pereira, Cura vicario of Alajuela and Thiel's secretary; Mercedes Quesada of San Ramón; Ramón Quesada of San Carlos; Baltazar Quesada of Grecia; and Colonel Concepción Quesada who commanded the thirteen soldiers. Among the Maleku Indians providing testimonies through Santiago, the interpreter, were Sotero and Rafael captured by Thiel's party in 1882; Santiago Fernández, Thiel's interpreter; and Joaquín and Concepcion brought by Thiel back to Costa Rica from Nicaragua in 1882.

 2 On March 3, 1896 Bishop Bernardo Thiel selected a site on the right side of the Río Frío River for the construction of the first Catholic Church, and elected San Rafael as the patron saint of the future church and population center. As the region was known as the Guatuso Plains, named after its native inhabitants, this settlement with time came to be known as Guatuso. The original site chosen by Bishop Thiel is actually where the town is located today.

10. The Expansion of the Nicaraguan Settlement Frontier and the Maleku Society, 1900-1950

From 1900 to 1950, the Maleku indigenous people experienced contacts with Nicaraguan political and economic refugees who settled on their territory and Catholic priests who visited them from Nicaragua and Costa Rica. In the meantime, the presence of the Costa Rican State institutions slowly began to make their presence in the region. This chapter documents the Nicaraguan settlement expansion into the Maleku territory, the continuation of the Catholic Church's attempts to indoctrinate the indigenous peoples, and the evolving efforts of Costa Rican governments to integrate the region into the rest of the country. In addition, it examines the geographic and cultural changes on the Maleku indigenous group brought about by these outside elements.

10.1 The Nicaraguan Settlement Expansion

The expansion of the Nicaraguan settlement frontier and economic activities into the Río Frío region, which began at the end of the 19th century, increased throughout the first half of the 20th century. Political instability, internal armed conflicts, and land tenure problems were the push factors triggering the emigration from Nicaragua. Beginning with the overthrow of the Liberal dictator José Santos Zelaya in 1909, continuing with César Augusto Sandino's guerrilla struggle against United States occupation's forces in the 1920s, and the starting of the Somoza's dictatorship in 1933, Nicaraguan landless peasants and persecuted political refugees settled the Río Frío region for lands, security, and peace (Borge 1991:21; Castillo 1992b:15).

Following up navigable rivers such as Frío, Sabogal, Purgatorio, Caño Ciego, Pataste, La Muerte, Buenavista, and Mónico, the Nicaraguan immigrants established dispersed farms and new settlements (Figure 9.2). By 1923, there were six small villages in the Río Frío watershed, which included Guatuso, Los Chiles, Caño Negro, San Emilio, Playuelas, and El Porvenir. The village of Guatuso with around 500 people consisted of an old police station established in 1882 and several dispersed farms owned by Nicaraguans. There was no church, school, telegraph, radio, or newspaper (Céspedes 1923:46-47). By

1928, the total population living in Guatuso and the other five communities located throughout the Río Frío watershed was about 1,000 people (Archivo Nacional 1928).

During the first three decades of the 20th century, the Nicaraguan settlers subsisted on planting cacao, rubber, plantain, fruits, rice, corn, beans and manioc, on raising chickens, pigs and cows, as well as on hunting and fishing activities. They traveled down the Río Frío to San Carlos and Granada, Nicaragua to sell agricultural products, including oranges, firewood, pig fat, and small quantities of rubber in order to acquire basic goods (Castillo 1992b:17). The navigable rivers, particularly the Río Frío was the artery that allowed the newcomers to maintain economic and socio-cultural ties with their home country.

During the 1930s and 1940s the production of cacao, the extraction of *raicilla* (*Cefaela ipecacuana*), rubber (*Castilla elastica*) and hardwoods, and the exploitation of crocodile and caiman skins were the most important economic activities of the region. Foreign entrepreneurs from Nicaragua, Cuba, and the United States hired local contractors in Los Chiles to cut mahogany (*Swietenia macrophylla*), cedar (*Cedrella adorata*), laurel (*Cordia alliodora*), areno (*Simarouba glauca*), and cenízaro (*Pithecellobium saman*). The logs were transported down the Río Frío to sawmills located in San Carlos and San Juan del Norte, and from there shipped to Cuba and the United States (Borge 1991:34). The rubber activity revived in the 1940s because of its high demand caused by War World II. Local collectors sold *Castilla* rubber to the Rubber Development Corporation, with offices in Los Chiles from 1940 to 1946 (Ballestero 1952:153).

Approximately 23,995 kilograms of *raicilla*, used for medicinal purposes were collected in the San Juan River region, including the Río Frío between 1947 and 1949, generating about US \$173,970 (León 1952:90). There was also over-exploitation and illegal traffic of aquatic species such as guapote and gaspar (tropical gar), and crocodile and caiman skins from the region to Nicaragua (Castillo 1992b:18). Most of the rubber, *raicilla*, wood, and skin collectors were Nicaraguans. This commercial boom caused practically the extinction of mahogany, rubber, and cenízaro trees and crocodile populations in the Río Frío area (Sequeira 2000:pers.comm.).

The economic boom associated with market and resource availability was stimulated by the arrival of diesel engines and outboard motors, which increased the amount of and range of extractive activities and the fluvial trade with Nicaragua (Borge 1991:31; Girot and Nietschmann 1992:56). The economic boom also attracted more Nicaraguan migrants to the area, establishing more settlements alongside navigable rivers (Table 10.1). These settlements played central functions (retail store, soccer field, liquor store) for a dispersed population of houses and isolated farms. By 1950 there were around 18 settlements founded by Nicaraguan colonists in the Río Frío region, with a population of about 2,000 (Figure 9.2). The extractive activities led to the deforestation and disruption of forest areas and wetlands ecosystems that were important for Maleku's livelihood.

Rivers	Settlements	Place of Origin
Frío	Guatuso, Los Chiles, San Emilio,	San Carlos, Chontales,
	Playuelas, Caño Negro, Betel,	Boaco, Granada, Rivas,
	Guayabo, Caño Ciego	Ometepe
Sabogal	Los Corrales, El Amparo,	San Carlos, Chontales
	Playuelitas,	
Purgatorio	Gallo Pinto, San Jorge	San Juan, Chontales,
-		Boaco
Caño Ciego	Puerto Nuevo	Ometepe, Rivas,
		solentiname, Chontales
Pataste	Pataste, Pataste Abajo	Ometepe, Solentiname,
		San Juan, Chontales
Buenavista	Buenavista	Ometepe and
		Solentiname
Mónico	Porvenir	San Juan, Chontales

Table 10.1. Settlements Founded by Nicaraguan Colonists in the Río Frío Watershed and Places of Origin in Nicaragua, 1896-1950

Sources: Castillo 1992b; Borge 1991

10.2 Catholic Influence

The religious indoctrination and civilizing endeavor initiated by Bishop Thiel continued with less intensity in the first half of the 20th century. Priests and missionaries from Nicaragua and Costa Rica sporadically visited the Maleku communities to celebrate mass, baptize children, and marry couples. Among the religious visitors were Fray Gregorio de Beire, a Capuchin from Granada, Nicaragua; Salomón Valenciano y Gómez and Tomás

Grytzca from Zarcero; José del Olmo from Naranjo; Clodoveo Hidalgo from San Ramón, and some other missionaries from Nicaragua (Céspedes 1923:42).

The most important of these ecclesiastical visits occurred on April 1923 when Antonio del Carmen Monestel, Bishop of Alajuela, came to the Maleku communities. Luis Sibaja García, Governor of the Alajuela Province, the first governor to visit this region, accompanied Bishop Monestel. The account of his visit to the Maleku palenques in 1923 was published in a book entitled "Crónica de la visita oficial y diocesana al Guatuso, 1923," by Amando Céspedes. According to this written source, the Maleku were considered to be Christians because most of them had been baptized, confirmed, and married by the Nicaraguan and the Costa Rican Catholic priests mentioned above. However, Catholic ceremonies and rituals made little sense to the Maleku since most of them understood and spoke little Spanish (Céspedes 1923:51). Apparently, they were willing to participate in the religious ceremonies, and actually showed some interest, because of the gifts, medicines and other tools brought by the visitors. The truth was that most of the Maleku people still practiced and believed in their own traditional religion (Céspedes 1923:72).

10.3 Costa Rican State Presence

The Costa Rican state showed little interest in the isolated and peripheral Guatuso northern plains throughout the first half of the 20th century. This situation resulted in few efforts to integrate the region politically and economically into the rest of the country. This lack of interest could be attributed to the loss of importance of this region as the construction of the Nicaraguan interoceanic canal failed, and the colonization projects at the end of the 19th century were abandoned due to difficult climatic conditions and poor communication access. In addition, the fact that this region was sparsely populated, mostly by Nicaraguans who maintained economic and social-cultural ties with their home country, and that it remained little attracted to Costa Ricans.

Costa Rica's political authority, though slowly, began to make its presence in the region. In 1905 by petition of the residents of the area, the National Congress approved 5,000 Costa Rican Colones to open a road between Cañas and the settlements of Guatuso,

Upala, and Caño Negro. The residents complained that there was better communication with Nicaragua than Costa Rica. It took four days by horse to reach Guatuso from the Central Valley and two days from Cañas, Guanacaste. In comparison, it took only one day navigating down the Río Frío to get to San Carlos of Nicaragua, and for this reason, most of the commercial trade was done with Nicaragua. The local people urged the government to construct such a road, so Costa Rica could benefit from the production of rubber, cacao, maize, beans, and rice (Archivo del Congreso 1905).

In 1915, Guatuso and Los Chiles were declared "barrios" (neighborhoods), and became politically and administratively part of the Grecia Cantón in the Province of Alajuela. However, it was not until 1923 that an important political figure, Luis Sibaja García, Governor of the Alajuela Province, visited for the first time the Guatuso area, including the Maleku communities. A visitor in 1923 described the situation in the following way:

"This region could be named Costaragua because the land belongs to Costa Rica, but the cultural customs, the people, the money currency and newspapers were Nicaraguans. We had to pay everything in córdobas and when not, to give five colones for one córdoba in exchange" (Céspedes 1923:103).

By 1928, the residents of Guatuso still lacked a decent road to communicate with neighboring towns. Residents of this community complained about the low prices they obtained for selling their products in San Carlos of Nicaragua, and the high prices they paid for basic goods such as clothes, shoes, sugar, salt, farming tools, batteries, and other provisions. For this reason, they presented a petition to the National Congress of Costa Rica, which approved 25,000 colones to convert the trail connecting Guatuso and Tilarán into a road (Archivo Nacional 1928). The construction of such a road would allow them to take their products right into the Central Valley's markets. It is worthy to mention that eight Maleku men signed the original petition sent to the National Congress for the construction of the road (Archivo Nacional 1928).

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Two more interventions of the Costa Rican government in the area included the establishment of the first primary school in Guatuso in 1928, and a fiscal police post in Guatuso and Los Chiles in 1935. The latter was with the intention of establishing better control over the movement of people and goods between Costa Rica and Nicaragua. The police and primary teachers were for many years the only Costa Rican State representatives in the region. This situation changed after 1939, when the barrios of Guatuso and Los Chiles were elevated to "consejos distritales" (District Committees), and obtained the right to elect political representatives to the Municipality of the Grecia Cantón (Salguero 1991:93).

10.4 The Geographic and Cultural Impacts on the Maleku

One of the most important changes experienced by the Maleku indigenous peoples between the visits of Bishop Thiel in 1896 and Bishop Monestel in 1923 was the reduction of their population from about 267 people to only 127. The small population was composed of 39 men, 34 women, 27 boys, 20 girls, and seven recent births (Céspedes 1923:120). Among the factors contributing to the population decline were diseases and malnutrition. The most problematic diseases affecting the Maleku reported in 1923 were venereal, malaria, bronchitis, tisis, skin infections, lung problems, and diarrhea (Céspedes 1923:67). Probably, some of the diseases affecting the Maleku might have been acquired through contacts with Nicaraguan colonists, Costa Rican police, Catholic priests, and other visitors. Alcoholism was also a serious problem among the Maleku and was responsible for some deaths (Morera 2000:pers.comm.).

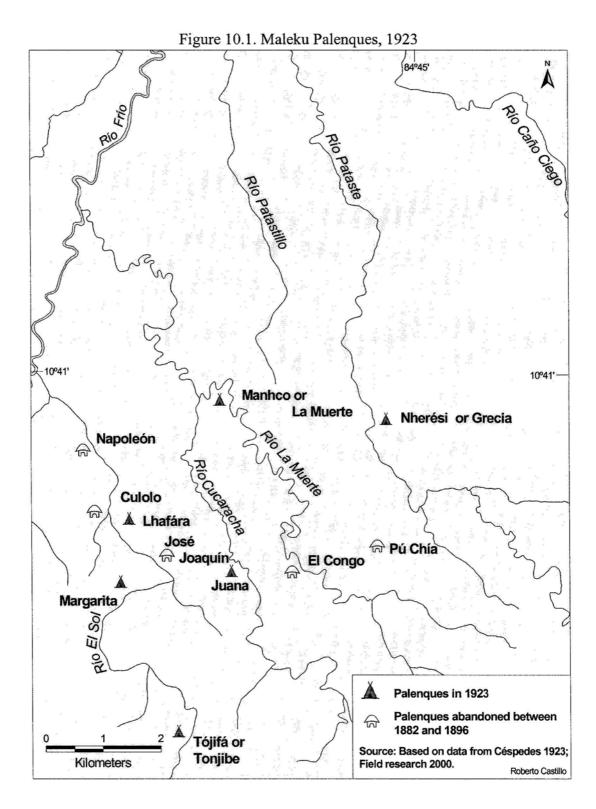
In addition, because of the rubber gatherer actions in the 19th century, the Maleku population was reduced to a small population dominated by adult males. The low proportion of women in fecund age might have affected the number of births in the preceding decades, which combined with relative high mortality rate produced a negative natural growth of the Maleku population. Although the native population was smaller in 1923 compared to 1896, it was more balanced in terms of its composition of men, women, and children, playing a fundamental role in the recovering of the Maleku population in the future.

Concomitant with the decline in the population, there was also a reduction in the number of palenques from eight to six. Palenques Culolo (Nicolás) and José Joaquín (Pedro Jeréz) located along El Sol River disappeared. Palenques Manhco or La Muerte on La Muerte River, Nherési or Grecia on the Pataste River, Margarita, Tójifá or Tonjibe, and Lhafára on El Sol River, and Juana on the Cucaracha River survived (Figure 10.1).

The expansion of the Nicaraguan settlement and commercial activities resulted in the reduction of the Maleku historical lands. The distribution of settlements established by Nicaraguan colonists on the Río Frío watershed shows how important tracts of lands were taken from the Maleku, particularly those located along the Frío, Pataste, Caño Ciego, Sabogal, Purgatorio, Buenavista, Samen and Mónico Rivers (Figure 9.2). The Nicaraguan settlers used different ways to expropriate lands from the Maleku. They bought it for ridiculous prices or gave horses, liquor, alcohol, dogs, or old rifles to indigenous landowners in exchange for land. In many cases an indigenous owner agreed to sell, for example one hectare to a Nicaraguan colonist, but the buyer took three or four times more land than he agreed to buy. Intimidation was also used to persuade the Maleku to sell their land, and in many cases, the Nicaraguans simply invaded the land, threatening the lives of the Maleku giving opposition (Cruz, Elizondo, and Cruz 2000:pers.comm.).

The first primary school, established in Guatuso in 1928, became an important vehicle of acculturation of the Maleku people. The children had to walk several kilometers through forest and swamps, exposed to poisonous snakes, tigers, heavy rains, flooded rivers, and lightning (Porras 1959:49-50). Parents, who refused to send their children to school, were incarcerated and put in holes with stocks on their feet by the local police (Cruz, Elizondo, and Cruz 2000:pers.comm.). Teachers punished mentally and physically Maleku children who spoke their own language (Mejía, Jaen, and Mójica 1996:30). The school was an instrument of acculturation since it drew indigenous and non-indigenous individuals together for the first time, and opened the door for the Maleku children to adopt new cultural traits.

The Maleku people were also subjected to the maltreatment and violations of local police, which began late in the 19th century. The native population was forced by the local



authority to perform tasks and duties against their own will. The Maleku cleaned up the Río Frío channel from Guatuso to the mouth of the Sabogal River to make canoe navigation possible and expedited communication with San Carlos of Nicaragua. They also cleaned up and widened the trail connecting Guatuso and Tilarán to allow transport with oxcarts. They also cleared up the area occupied today by Guatuso, which was settled by Nicaraguan immigrants. In complicity with local authorities, the Nicaraguan settlers forced the Maleku to work in their cacao plantations. Nicaraguan traders who monopolized the transport of products to and from San Carlos of Nicaragua also forced native men to take exhausting trips down and up the Río Frío to San Carlos with boats full of products. Finally, policemen also came into the Maleku palenques and destroyed large pottery jars containing *chicha* drinks, banished stick fights, and incarcerated drunken people (Cruz L. 2000:pers.comm.).

The Maleku experienced strong racism and discrimination from Costa Rican visitors and Nicaraguan settlers. They were described as "animals," "morons," "pigs," "drunkards," and "lazy people." Amando Céspedes who accompanied Bishop Monestel to the Maleku plaenques in 1923 as reporter for the newspaper Diario de Costa Rica wrote "on a hill of that beautiful region we had lunch among Indians and horses, which are almost the same" (Céspedes 1923:47), adding "if Bishop Thiel condoned them for illiterate, today they had to be condone for brutes. Fortunately, there are few of them left and their race is almost extinct, barely preserving the custom of receiving without giving anything back" (Céspedes 1923:48).

The Maleku feared and hated Nicaraguans because of their association with rubber gatherers. This hatred apparently increased as some Nicaraguan settlers took over their lands and were responsible for forcing them to work in their farms. Despite these profound differences, there were cases of intermixing between Maleku and Nicaraguan men and women. In addition, the Maleku adopted typical Nicaraguan foods such as tamales and tortillas. The introduction of *chirrite* or *guaro*, a strong alcohol beverage made of sugar cane, by the Nicaraguan settlers caused alcoholic problems on the Maleku society, which did not exist before. The Maleku consumed *chicha*, an alcoholic beverage made of maize, manioc, plantain, and peach palm, in special occasions and got drunk, but alcoholism was

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not a problem. They also drank light *chicha* daily with low content of alcohol as refreshment (Castro E. 2000:pers. comm.).

The Catholic priest visits, including that by Bishop Monestel in 1923, apparently were not successful in converting the Maleku into the Christian faith. These visits were short and sporadic, which did not help in establishing a permanent indoctrination process of the indigenous peoples. Nevertheless, the visitors maintained the tradition initiated by Bishop Thiel of introducing outside material elements such clothes, farming, hunting and fishing tools, crops, domestic animals, and house utensils. By 1923, only a few individuals wore traditional loincloths and skirts made of bark trees. Western clothes had become the most popular wearing attire (Céspedes 1923:66).

In conclusion, despite the external interference and the decline in population, settlements, and territory during the first half of the 20th century, the Maleku people preserved most of their customary historical way of life. By the end of the 1940s, the Maleku had certainly adopted some features of material culture such as Western attire, the use of metal tools and firearms, house and cooking utensils, and crops and domestic animals such as rice, beans, pigs, and chickens. However, they still strongly resisted the introduction of cows for religious reasons, and maintained important cultural elements and traditions such as language, religious beliefs, typical houses, music, dances, burial customs, and the preparation and drinking of *chicha*. In addition, polygamy, which began as a practice among the Maleku at the end of the 19th century, was also common in 1923 (Céspedes 1923:66,86).

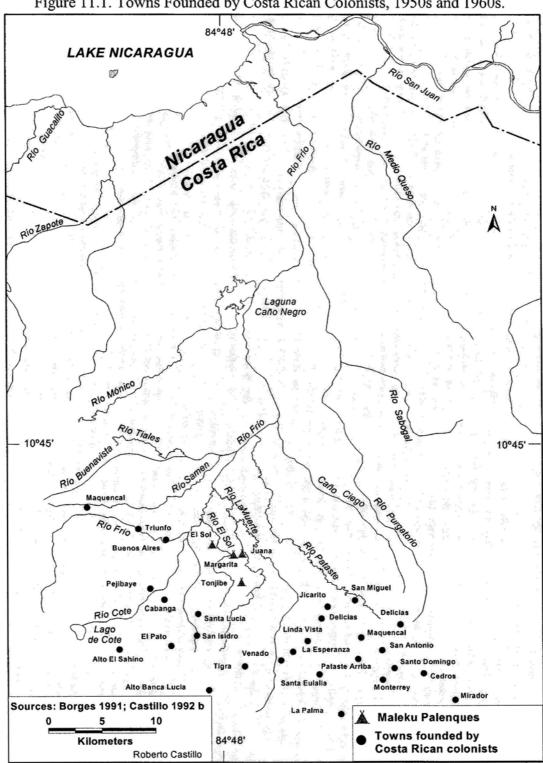
Despite the land dispossession, the small indigenous population still had enough lands to continue practicing their subsistence economy based on agriculture, gathering, fishing, and hunting activities. They cultivated manioc, plantain, peach palm, rice, cacao, sugar cane, and beans for self-consumption, but eventually sold small surpluses in Guatuso. The Maleku complained that the local traders paid miserable prices for their products, and for this reason, they also sold peach palm in the neighboring towns of Tilarán and Cañas during August and September. They spent two days carrying heavy loads of peach palm on their backs to reach Tilarán and one extra day to Cañas. With the money earned, they bought basic goods such as clothes, shoes, salt, oil, sugar, matches, batteries, bullets, machetes and others provisions (Elizondo E. 2000:pers.comm.). In addition, the gathering, fishing, and hunting activities complemented and covered their food and housing needs. The combination of the productive and extractive activities and the small-scale involvement in the market economy made the Maleku economically independent, which exempted them from becoming wage laborers on Nicaraguan settlers' farms.

11. The Territorial Loss, 1950s-1960s

During the 1950s and 1960s, the Maleku and their territory experienced the arrival of Costa Rican peasants, of more political and economic refugees from Nicaragua, and of Costa Rica's government initiatives to establish political and economic control over the region. These events took the Maleku out of their geographic and cultural isolation, and pushed them in favor of the adoption of the Costa Rica way of life. This chapter documents and explains the changes brought by the expansion of the Costa Rican and Nicaraguan settlement frontier, and the government strategies to integrate the region and the Maleku indigenous peoples into the dominant national culture.

11.1 The Expansion of the Costa Rican and Nicaraguan Settlement Frontier

The rapid growth of the Costa Rican population in the 1950s, land tenure problems, and laws that guaranteed the establishment of land ownership by making improvements (forest clearance for other uses), pushed landless laborers and peasants from Alajuela and Guanacaste provinces into the sparsely populated and peripheral region of the Río Frío. The newcomers, unlike the Nicaraguans, did not use the navigable rivers as routes of penetration and colonization, instead they used pre-existing trails, which connected Guatuso with Tilarán, Arenal, San Carlos, and La Fortuna. The Costa Rican colonists preferred to occupy the highlands and middle slopes of the Guanacaste Cordillera, where they formed several towns (Figure 11.1). This internal migration increased later with the improvement of the road connecting Guatuso and Tilarán, the 1968 eruption of the Arenal Volcano, and the completion of the Arenal Hydroelectric Project in 1976. The Arenal Volcano erupted in 1968 killing 78 people. Afraid of future eruptions, nearby residents moved out of the area and migrated to other places, including the Río Frío area. In 1976, the ICE (Instituto Costarricense de Electricidad) finished building the Arenal Hydroelectric Project, which enlarged the original lake to the eastern end of the valley, raising the lagoon level and creating a 490-square kilometer reservoir. The immediate effect of the reservoir was the flooding of several local towns. Many of the displaced people moved into the Río Frío area.





In the meantime, more peasants from Nicaraguan migrated to the region. After the 1950s, large areas of the Pacific Nicaragua's best agricultural lands were converted into cotton, sugar cane, and irrigated rice plantations. Similarly, in the 1960s large parts of the central highlands were devoted to large cattle ranches. This agro-export development led to expropriation and appropriation of small farms on the pacific and central Nicaragua's regions. The landless farmers were encouraged to migrate to the eastern part of the country by President Somoza's Agrarian reform law of 1963 while others decided to cross the border and settled in the northern plains of Costa Rica (Borge 1991:16; CAPRI 1992:51; MIDINRA-Z.E.III 1986:9-10). The repression of Somoza's dictatorship (1933-1978) also played a significant role in the migration of Nicaraguan peasants into the Costa Rica northern region. The story of María Linares from Los Chiles clearly described this situation:

"I was born in 1918 on the Ometepe Island, at small town called La Tijera. My father had a coffee farm next to the Mérida hacienda of the Somoza family. Somoza's administrator ordered my father to abandon the farm and go to Managua to collect 200 cordobas. When he refused, his life was threatened. In the end, he took the money and moved to Guatuso. In this way, the Somoza family came to have the cattle and coffee haciendas of Mérida, Corozal, San Ramón, and El Cairo" (Borge 1991:24).

Another resident of the region described a similar situation:

"In the Ometepe Island the pressure over the land was tremendous, for this reason the people always left the island. But, in addition, when an island resident had a farm next to the Somozas' haciendas, he (Somoza) sent a middleman to buy his neighbor farms. If they refused it, they were expelled by the National Guard" (Borge 1991:26).

As a result of the advancement of the Costa Rican and Nicaraguan colonization frontier in the Río Frío watershed, the population increased rapidly from about 4000 people at the end of the 1940s up to about 12,000 people in 1969 (DGEC 1970). The migration process was accompanied by the government's construction of some schools, roads, and airstrips to facilitate the political and territorial integration by agricultural colonists. The road connecting Guatuso and Tilarán was improved to put the region within the reach of regular vehicles during the dry season (February-April) and double traction vehicles year round. With the construction of airstrips in Guatuso and Los Chiles, regular flights connected to San José. Electricity was available through diesel engine generators owned by communities. Eventually, these little improvements in infrastructure allowed more Costa Ricans to move into the region.

The Costa Rican process of colonization was characterized in the first years by the conversion of forest into relatively small plantations of maize, rice, beans, cacao, plantain, and manioc. The lack of roads connecting the region to the rest of the country did not allow the development of large-scale commercial agriculture. The Nicaraguan immigrants, who arrived in the 1950s and 1960s, joined the Nicaraguan colonists already established in the lowlands. They engaged in small-scale commercial agriculture and the collection of *raicilla*, maintaining economic and socio-cultural ties with Nicaragua over the navigable rivers. A commercial expansion of cattle ranching occurred during the 1960s due to the demand for meat in United States fast food restaurants, as well as for lodging activity carried out by Costa Rican entrepreneurs. This demand led to the over-exploitation and conversion of large extensions of forests, particularly in fragile headwaters and along the middle sections of the rivers, into grazing lands (Castillo 1992b:19).

Unfortunately, the newcomers who came with the settlement frontier settled on Maleku's collecting, hunting, and fishing grounds, and even on their agricultural lands near their communities. Using tactics similar to those of the first Nicaraguan, the new Costa Rican and Nicaraguan colonists, sometimes working with outside land speculators, took over extensive areas of indigenous lands (Cruz, Elizondo, and Cruz 2000:pers.comm.).

Concerned with the lost of Maleku's lands the Junta de Protección de las Razas Indígenas de la Nación (Committee for the Protection of the Indigenous Peoples) petitioned the government of Costa Rica to create a land reserve for the Maleku indigenous group. The Junta de Protección de las Razas Indígenas de la Nación was formed after the First Inter-American Indigenist Congress in Pátzcuaro, Michoacán, Mexico in 1940. Indigenismo was an open, peaceful, official policy to integrate and assimilate indigenous peoples into the mainstream of national cultures through education, economic, health, and social programs. This integrationist policy was officially adopted in this congress. Many Latin American countries, including Costa Rica, ratified the agreement reached in this congress, and subsequently established a National Indigenist Institute on its own. Costa Rica established the *Junta de Protección de Razas Indígenas de la Nación* by decree No. 45 in 1945, to raise the standards of health, culture, and education among the native population (Guevara and Chacón 1992:50; Ornes 1980:78). In addition, article 8 of the 1939 *Law of Terrenos Baldíos* recognized as an inalienable and exclusive property of the Indians "a prudential zone deemed suitable by the Executive Power, with the aim to conserving our native races, and liberating them from future injustices" (Chacón 1990:19). One of the main reasons for the creation of the *Junta de Protección de Razas Indígenas de la Nación* was to enforce article 8 of the 1939 *Law of Terrenos Baldíos*.

In 1957, the government established a reserve for the Maleku people with an extension of about 11,000 hectares, including sections of the Frío, Venado, El Sol, La Muerte, and Cucaracha rivers (Figure 11.2). The criteria used by the *Junta de Protección de Razas Indígenas de la Nación* to define and delimit this reserve are unknown. Unfortunately, this reserve lacked legal support, land titles, and territorial demarcation. Consequently, Nicaraguan and Costa Rican colonists continued illegally to appropriate Maleku Reserve lands (La Nación 1959:7; 1963b:22). By the late 1960s, most of the reserve lands were in the hands of non-indigenous peoples (Bozzoli 1972:3). Colonists had several excuses to justify the appropriation of Maleku's Reserve lands. They considered the indigenous peoples to be lazy since they cultivated just for self-consumption, and left their plantations unattended, covered with weeds, which impel them to obtain better productions. In addition, they believed the Maleku had too much forestry lands that they did not cultivate at all (La Nación 1963b:22). The colonists ignored that the Maleku not only depended on small-scale subsistence agriculture but also on fishing, hunting, and gathering activities, requiring relatively large extensions of forests near their communities.

11.2 Demographic and Cultural Changes

The territorial reduction experienced by the Maleku was associated with other changes during the mid-20th century. The Maleku population grew slowly from 127 in 1923,

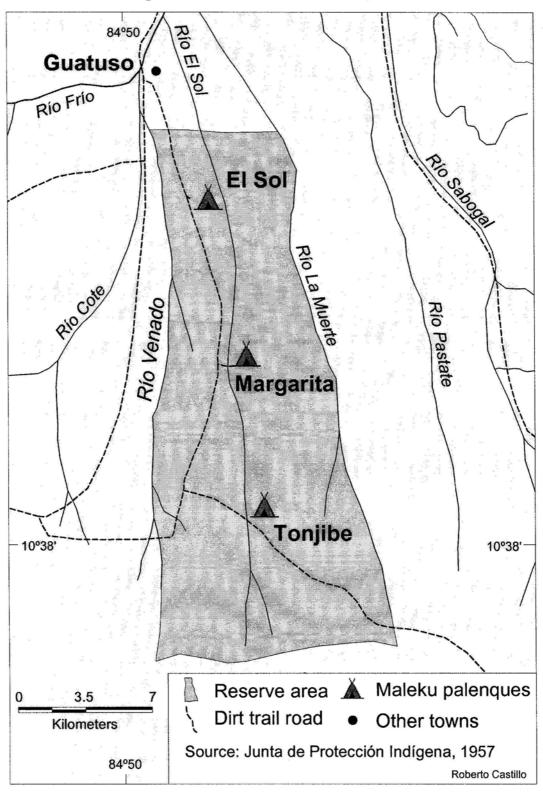


Figure 11.2. Guatuso Indian Reserve, 1957

to 130 in 1954, to only 154 in 1967 (Bozzoli 1972:2; Quirós 1954:76; Ríos 1972:1) (Table 11.1). Several epidemic diseases had killed many of them in the 1940s (Porras 1959:96). Another reason for the slow population growth was the high mortality, particularly infant mortality, caused by several diseases such malaria, tuberculosis, typhoid, intestinal parasites, malnutrition, and anemia (Bozzoli 1972:11; La Nación 1963a:20; 1963c:21-22). For every seven babies born in 1967, only two of them survived (Ríos 1972:7). Alcoholism was also reported to be a major problem, and was responsible for some deaths among the Maleku (La Nación 1957a:14).

Palenques	Number of Houses	Males	Females
Margarita	17	41	36
Tonjibe	13	29	27
El Sol	4	11	10
Total	34	81	73

Table 11.1. Distribution of the Maleku Population in 1967

Sources: Bozzoli 1972:3; Ríos 1972:1

The high mortality index was also attributed to the lack of pure drinking water and sanitary toilets, as well as the lack of public health services (Meléndez 1959:221-223). During the 1960s to receive medical attention, the Maleku had to travel to Costa Rica's Central Valley (La Nación 1963c:21-22). Private institutions such the Juniors Chamber of Ciudad Quesada organized a group of doctors and dentists to visit the Maleku communities throughout the decade. They provided medical attention to the three indigenous communities and brought clothes and medicines. Despite these private efforts, the results were not successful because the lack of continuity in the medical treatment due to the difficult communication conditions to reach the area (La Nación 1963a:20). During the 1960s, the region remained accessible by horse, plane, or regular vehicle mostly during the dry season. The government efforts concerning health problems consisted of sending a doctor once a year to attend the indigenous communities, of fumigating the communities to eradicate malaria, and of launching tuberculosis vaccination campaigns (Bozzoli 1972:13).

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Parallel to the small increase in population and loss of lands, the number of palenques or communities decreased from six in 1923 to three in 1967. The communities of Manhco or La Muerte, Nherési or Grecia, Lhafára, and Juana had disappeared, leaving only three palenques: Tonjibe, Margarita, and El Sol. The community of El Sol was apparently established by a family that moved out from palenque Lhafára in the 1940s (Cruz L. 2000:pers.comm.). The last palenque to disappear was Juana in 1958 (Porras 1959:41).

The Costa Rican government became more active in the acculturation of the indigenous peoples through the establishment of schools and housing programs in the indigenous communities. The local school became the most important vehicle of acculturation of the indigenous society, even more effective than the religious indoctrination initiated by Bishop Bernardo Thiel. The first primary school was established in Margarita in 1950, and its teacher, Reinaldo Ballestero, was one of the first links between the indigenous group and the government's representatives. Ballestero became an activist for the Maleku and he solicited projects and services for the communities. Besides teaching Spanish, he introduced soccer, beds for sleeping, water-wells, and latrines (Ballestero 1952:157). He also acted as nurse, agronomist, and bridge builder (Porras 1959:66-67). In 1965, another school was built in Tonjibe.

Ballestero's educational and civilizing mission was continued by his successor Ramón Luis Chávez. He was active in bringing farming tools and crop seeds such as maize, beans, and rice to the indigenous communities to improve their life conditions. He spoke against alcoholism, vagrancy, laziness, and violence against women, and saw education as the vehicle to improve Maleku's life and assimilation (La Nación 1957b:7). In these schools the children began to learn Spanish and cultural traits of the dominant national culture. By the late 1960s, people between 8 and 25 years old had learned to write and read Spanish very well, although the entire population still spoke their native language (La Nación 1963b:22; Ríos 1972:1). This process of acculturation was reinforced by the spread of radio broadcasting and occasionally newspapers.

The Costa Rican Institute for Housing and Urbanization (INVU) built single-family houses in Margarita and Tonjibe in 1963. These houses were copies of the Central Valley's

models made up of wood walls and wood floors with metal roofs, doors and windows, and arranged in a residential pattern. The introduction of this type of houses replaced the traditional multi-familiar habitations, destroying the old time domestic units of large extended families, in which the Maleku society was organized. The single-family houses also posed a serious problem to the tradition of burying the dead inside the houses. As soon as the houses were occupied, the residents began to take out the wood floor to bury the dead, and wood from the walls was used as firewood. In a few months, these houses became truly shanty houses. In addition, the newly introduced houses were not well adapted to the hot and humid conditions of the region, causing initially health problems among the indigenous population (González and González 1988:7-8). The Maleku remember that these houses were like closed boxes, similar to jails, too hot to live in.

One of the major changes experienced by the Maleku people was engaging in paid labor. During the 1950s and 1960, the Maleku continued to engage in small-scale agriculture for self-consumption and selling small surplus of avocados, rice, beans, peach palm, pigs, chickens, eggs, oranges, and cacao in the neighboring towns of Guatuso, Tilarán, and Cañas. The indigenous population was not interested in expanding their agricultural plantations for commercial purposes because local buyers paid ridiculous prices for their products, and the lack of roads precluded them from taking products directly into the Central Valley's markets (Arguedas 1972:18; Ballestero 1952:156; La Nación 1959:7). In addition, they refused to get involved in the cattle ranching activity since cows were part of their religious taboo food. However, the urgency for money to buy basic goods such as coffee, salt, sugar, candles, clothes, shoes, and matches, as well as newly introduced things such as rifles, bullets, machetes, hatchets, clocks, batteries, cigarettes, liquor, and radios pushed men and women to work for money. Maleku men worked as peons on mestizo farms while women worked as housemaids on neighboring mestizo households. Maleku workers were exploited by mestizo landowners, who paid them miserable salaries, and in some cases, even received bottles of liquor in exchange for their work (Cruz, Elizondo, and Cruz 2000:pers. comm.). The Maleku were becoming wage earners.

The outside religious indoctrination efforts were not enough for the Maleku to abandon their religious beliefs, food taboos, and special ceremonies, involving drinking *chicha*, dancing, and singing (Ríos 1972:9). Catholic priests from Tilarán visited the indigenous communities only twice a year. A Mennonite pastor, Henry Teigrob from Canada came to the area in the 1960s, and apparently converted some Maleku to Protestantism. With the help of the community, this pastor built an airstrip near Margarita, and using his small airplane brought clothes and medicines, and transported sick people to San José's hospitals (IETSAY 2000:84-85).

Unfortunately for the indigenous society, the last priest or medium (*Tócu lhóqui cuácuacsufa maráma*) died in 1958. His Spanish name was Fernando Cordero (*Pári Jári* in Maleku). He lived in the Tonjibe palenque and was highly revered and respected by the entire community. People from the other palenques came to consult him about the success or failure of hunting and fishing trips, agriculture harvest, diseases, flooding events, family and neighbor conflicts, and messages from their dead relatives as well. People brought him gifts and particularly cacao seeds for his special services. He was training a grandchild to succeed him as a priest, but disciplinary problems of his student and his death prevented him from concluding the job. His grandchild was Francisco Elizondo, a local investigator in this research.

Although the communities did not have formal chiefs or leaders as in the past, in each of the three existing palenques there were one or two persons, who the people respected and consulted for personal and community matters. Informal leaders or advisors in Margarita were Felix Ramón Fonseca and Agustín Mójica, in Tonjibe Eliseo Elizondo, and El Sol Froilán Elizondo (Ríos 1972:10)

In conclusion, during the 1950s and 1960s the Maleku population experienced a meager recovery while suffering a significant reduction in their ancestral lands and number of palenques. They also witnessed the loss of important cultural elements such as their traditional houses, the disintegration of their large extended family units, and the disappearance of a customary religious figure. The Maleku for the first time also engaged in wage labor, learned Spanish, and adopted other outside cultural elements such as soccer, western clothing, metal cookware, beds, rifles, and sanitary toilets that became part of their life. Although fishing, hunting, and gathering were becoming scarce because of

deforestation, over-exploitation, and competence from newcomers, by the end of the 1960s the Maleku's livelihood still highly depended on these traditional extractive activities and on subsistence agriculture. Important indigenous traits still preserved included language, religion, food taboos, burial customs, celebrations, music, dances, fabrication of bags for carrying food, and preparation of different types of *chicha*.

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12. Acculturation and Integration of the Maleku People, 1970-2000

The state presence and actions on the Costa Rica's northern border region increased over the last three decades. The Costa Rican government policy toward the region has consisted of sponsoring frontier-expanding peasant colonies, of supporting new commercial activities, of creating new political-administrative counties, of setting up physical infrastructure and social services, and of establishing protected areas. The government actions directed toward the Maleku have focused on the creation of the Guatuso Indian Reserve, the construction and improvement of road communication, and the provision of education, health, housing, and social services. This chapter describes Costa Rica's development policy toward the region and the Maleku over the last three decades, and analyzes its impacts on the indigenous group's population, lands, housing, livelihood strategies, language, and religion.

12.1 Political and Economic Integration of the Río Frío

Over the past three decades, the Costa Rican government has increased its presence in the Río Frío watershed and affirmed its political and economic authority. This interest was sealed in 1970 when by the Decree No. 4541 the Guatuso and Los Chiles districts, which belonged to the Grecia County, became independent counties of the Alajuela Province, with their own municipal governments. The Maleku communities of Margarita, Tonjibe, and El Sol fall under the jurisdiction of the Guatuso County.

Throughout the 1970s, the national government with support of the Guatuso Municipality undertook the construction and improvements of roads and bridges, airstrips, schools, and police stations. The dirt road connecting Guatuso with Tilarán and Arenal was converted into a gravel road, making it available for regular vehicles all year long. A dirt road was opened between Guatuso and El Tanque. Old dirt trails connecting county towns were widened and covered with gravel to allow circulation of vehicles throughout the year. For the first time, public bus transportation came to the area, and airline companies such as LACSA (*Líneas Aéreas Costarricenses*) and TACA (*Transporte Aéreo Centroamericano*) had regular flights to Guatuso, making communication possible with the Central Valley. In

addition, a small health clinic and a high school were built in Guatuso, and a water aqueduct was constructed in Margarita and Tonjibe (Castillo 1992b:21).

With the infrastructure improvements, more colonists, particularly landless peasants from the Central Valley and Guanacaste areas, continued moving into the Guatuso County, increasing its population from 4,676 in 1970 to 6,151 in 1980 (DGEC, 1971, 1981). The spontaneous colonization frontier expanded at expense of the forests, which were converted into pastures and agriculture lands. The region, which had historically been more oriented to Nicaragua culturally and economically, began its interconnection with the Central Valley and integration into Costa Rican society (Girot 1989:16).

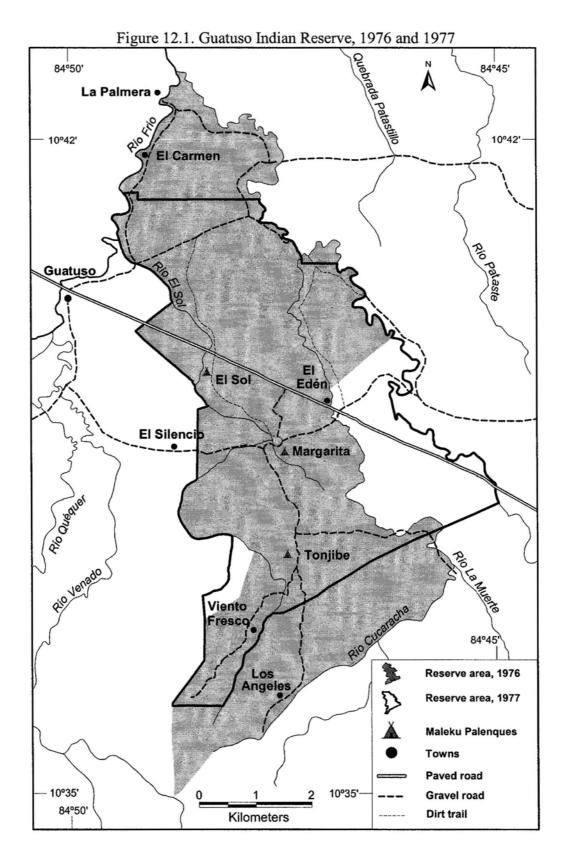
The usurpation of Maleku's lands by *mestizo* neighbors and newcomers continued in an alarming rate throughout the 1970s. From the original 11,000-hectare Indian Reserve established in 1957, the Maleku possessed only 602.5 hectares in 1974. The remaining land was under *mestizo* control (Table 12.1). There was a large disparity in the amount of land owned by Maleku and *mestizo* peoples. It was recognized that the Maleku generation of 1974 was born without land (La República 1975:5B).

Table 1	2.1.	Lands	Under	Maleku	Control,	1974
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Land Use	Total Hectares		
Forest	205.5		
Pasture	71.0		
Agriculture	326.0		
Total	602.5		

Source: La República 1975:5B

In recognition of this alarming dispossession of Maleku's lands, the Costa Rican government created the Guatuso Indian Reserve in 1976 with an area of 2,994 hectares (Decree No. 5904-G). Comparing the new reserve with the one established in 1957, the reserve was reduced by about 8,000 hectares. The following year, the boundaries of the Guatuso Indian Reserve were re-demarcated, reducing its area to 2,744 hectares (Decree No. 7962-G). Thus, the Maleku lost an additional 250 hectares (Figure 12.1).



The Guatuso Indian Reserve acquired status of law with the approval of the Costa Rican Indigenous Law in 1977 (Law No. 6172). This law was the first one to recognize that indigenous peoples live in Costa Rica, and that they have rights over territories or what are called "Indian Reserves." This law stipulated that Indian Reserves are "*inalienables e imprescriptibles, no transferibles y exclusivas*" of the indigenous communities. Despite the legal support of this law, invasions of the Reserve's lands and illegal logging continued after its establishment. Moreover, the Costa Rican government did not expropriate nor pay for the lands owned by non-indigenous peoples living inside the Reserve, which by law was to be returned to the Maleku.

During the 1980s, the political and military conflicts in Nicaragua between the Sandinistas and the Contras motivated the Costa Rican State to reinforce its political and economic control over the northern border counties of Upala, Los Chiles, and Guatuso. With the financial support of the United States¹, the Costa Rica government began in 1983 a geopolitical program called "Nationalization of the Northern Region." This program consisted of setting up a communication network connecting the region with the Central Valley of Costa Rica, of providing new social services such as schools, hospitals, clinics, telephone, electricity, pipelines, banks, and of establishing agricultural settlements with peasants mainly from the Central Valley (Granados and Quesada 1986:56).

Several roads and bridges were constructed during the 1980s in the Guatuso, Upala, and Los Chiles counties, including a 40-kilometer asphalt road between Guatuso and El Tanque (Ciudad Quesada). This new paved road traversed the Guatuso Indian Reserve, and it is located only 500 meters from El Sol, one kilometer from Margarita, and three kilometers from Tonjibe. A wood bridge on El Sol River and a gravel road were built to connect Tonjibe and Margarita to the paved road. The historic fluvial network of economic activity was re-oriented to the new road network connecting the region to the interior of the country.

The aggressive colonization policy of the government and the developments in physical infrastructure and social services led to the rapid population growth of the Guatuso County, and to the associated forest destruction and environmental problems. The population of the Guatuso County increased from 6,774 in 1984 to about 13,045 in the year 2000 (DGEC 1987; INEC 2001). New towns appeared alongside new constructed roads, and population concentrated in Guatuso, which became urbanized. The increasing population caused the conversion of large extensions of forest into pastures and farmlands, which were used historically by the Maleku for hunting and gathering activities. Between 1988 and 1992, around 18,693 hectares of forest were cleared off in the Guatuso County (about 20% of the county) because of the lodging activity and the advancing of the colonization frontier (Castillo and Rodríguez 1993:18). In addition, the forest coverage of the Guatuso Indian Reserve was reduced from 2,577 hectares in 1961 to only 280 hectares in 1992 (Castillo 1992b:24) (Figure 12.2). The indiscriminate deforestation, particularly of the upper and middle parts of the Guanacaste Cordillera has increased soil erosion, and consequently the sedimentation of rivers and lagoons, damaging their navigability and ecological functions, and increasing the risk of flooding. The use of agrochemical and artificial fertilizers by commercial monocultures, and the lack of appropriate garbage and water sewage disposals have polluted the wetland ecosystems. In addition, the excessive exploitation of aquatic and terrestrial wildlife species for consumption and commercial purposes, the runaway ground fires, and the illegal poaching and traffic of wildlife species have further contributed to the degradation of the region's biodiversity (Solano 2002:72-73).

12.2 Impacts on the Maleku Culture

The spontaneous and planned colonization of the Guatuso County and related spatial transformations, taking place in the last three decades, have affected important aspects of the Maleku population, lands, housing, livelihood, language, and religion.

12.2.1 Population

During the last three decades, the Maleku population has experienced a small increase from 187 in 1974 to 380 in 2000 (Table 12.2). According to the population census conducted by the researcher and the three local investigators in the year 2000, using the criteria of ancestry, language, and self-identification, the Maleku were estimated in 380 people. This population estimate is different from the 425 Maleku counted by the 2000-

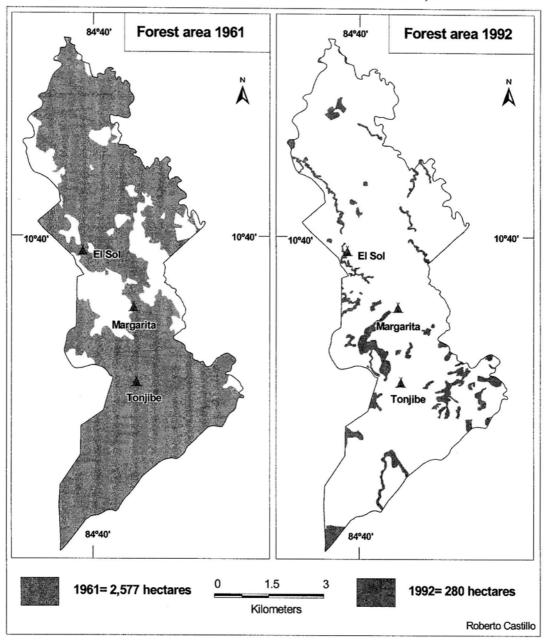


Figure 12.2. Forest Reduction in the Guatuso Indian Reserve, 1961 - 1992

national census, using only the criterion of self-identification (INEC 2002). It is possible that the 30 non-Maleku persons living with Maleku partners and some *campesino* neighbors identified themselves as Maleku in the 2000-national census because of long-standing friendship, empathy, some knowledge of the language and culture, and intermarriage ties. This situation probably explains the difference in the population size obtained by the two censuses. Despite the increase in population, the Maleku are still a minority in their own territory. In the year 2000, there were 1115 people living in the Guatuso Indian Reserve, of which only 38 percent were members of the Maleku indigenous group (INEC 2002).

Palenque	1974(1)	1987(2)	1996(3)	2000(4)	2000(5)
Margarita	99	175	157	153	-
Tonjibe	73	-	139	178	-
El Sol	15	-	53	49	-
Total	187	350	349	380	425

Table 12.2. The Growth of the Maleku Population, 1974-2000

The establishment of health centers in Guatuso and Margarita in 1972 and in 1983 respectively, gave the indigenous community access to basic medical attention and medicines (Ugalde 1973:108). The introduction of school cafeterias also provided the children with free and nutritious meals. By the late 1970s, diseases such as malaria, measles, and tuberculosis had been eradicated thanks to the fumigation and vaccination campaigns conducted by the Ministry of Health. Stomach parasites and infections were also reduced with the installation of latrines and aqueduct running water systems in Margarita and Tonjibe in 1972 (Ugalde 1973:102). In addition, by the late 1970s, the National Institute on Alcoholism (INSA) began to organize group meetings of Alcoholic Anonymous to combat the problem of alcoholism. These health and sanitary improvements contributed to reduce the mortality rate, leading to the natural increase in the Maleku population.

Sources: (1) La República 1975; (2) Constenla 1988; (3) Field Census 2000; (4) INEC 2002.

12.2.2 Housing

State's institutions continued to be involved in housing programs in the Maleku communities during the 1980s and 1990s. The IMAS (*Instituto Mixto de Ayuda Social*) and the Municipality of Guatuso completed a housing project at Margarita in 1980. The houses built had three rooms with hexagonal shape, the lower walls were made of blocks and concrete and the upper half of wood with concrete floors, metal roofs, and built-in toilets and showers. The designers from IMAS borrowed the idea of the hexagonal houses from two separate circular ranchos with conical roofs they saw in Margarita and Tonjibe. Those ranchos were built as craft workshops by ANDA (*Asociación Nacional Pro-Desarrollo de la Artesanía*) and as a meeting place for Alcoholic Anonymous by INSA (*Instituto Nacional Sobre Alcoholismo*). Apparently, the house's designers assumed the circular and conical ranchos corresponded to the Maleku traditional houses (González and González 1988:8).

The Maleku disliked these houses for three reasons: (1) the hexagonal shape made it difficult to arrange the furniture, utensils, and appliances, (2) the houses looked heavy and dangerous in case of an earthquake, and (3) the concrete floors prevented some families from burying their dead relatives inside the houses. Other families simply decided to destroy part of the floor in order to dig the graves. In 1986, IMAS (Instituto Mixto de Ayuda Social) also built four-room rectangular houses in Tonjibe, made of concrete walls and floors, metal roofs, and built-in sinks, toilets, and showers (La Nación 1986:1B). People in this community also dug holes through the cement floors, on the kitchens or bedrooms to bury their deceased relatives.

The last example on the Maleku indigenous house was located in the community of El Sol, being declared of cultural interest in 1991. For the first time an indigenous house was included in the National Architectonic Patrimony for its preservation (La Nación 1992:1B). It is not a surprise that the last old style-house survived longer in this community since State's sponsored houses were never built there. The Department of Historical Patrimony of the Ministry of Culture, Youth, and Sports began its restoration in 1992. The house was expected to become a tourist attraction, where the owners could sell their crafts directly to outsiders without intermediaries, and in turn, to improve their precarious life and perpetuate an

important part of their cultural identity (La Nación 1992:2B). The restoration project was successful until the elder couple, who lived in the house passed away in 1995. The lack of maintenance of the house by surviving relatives inevitably led to its deterioration.

Inspired by the restoration project, some Maleku attempted to build old-fashioned houses again, but the lack of building materials (wood, lianas, and palm), attributed to the destruction of the forests by outsiders, prevented them from accomplishing their goal. The possibility of bringing the building materials from other places was too expensive (La Nación 1992:1B). In the end, the inadequate State-sponsored housing projects and the destruction of the forest, where the building materials were found, contributed to the disappearance of the most visible element of the Maleku cultural landscape.

12.2.3 Lands

The establishment of the Guatuso Indian Reserve in 1976 and the legal support of the 1977-Indigenous Law did not stop the usurpation of Reserve's lands by outsiders. It is unknown the exact amount of land the Maleku owned inside the Reserve when it was established in 1976. In 1974, the Maleku owned 602 hectares. In 1990, the Maleku invaded the farm called Mariley, a 500-hectare property within the reserve and belonging to a *mestizo* resident. About 250 hectares of this farm was expropriated by the government and distributed among 30 families in need of land (Blanco et al. 1996; La República 1990:7A). Thus, by 1990 the Maleku land possessions had increased to about 852 hectares. However, according to a land survey conducted by the Iriria-Tsotchok Foundation in 1996, the indigenous land had been reduced to 606 hectares (Morales 1996). Thus, in six years the Maleku lost 246 hectares of their reserve lands.

There is another way to document the rapid process of dispossession of the reserve's lands. In 1996 there were 1,032 hectares (35%) owned legally by non-indigenous peoples. They were considered legal owners, because they lived within the reserve's boundaries before or at the time it was established in 1976. In 1996, the Maleku controlled 606 hectares (20%) of the reserve's lands, which left 1356 hectares (45%) in the hands of non-indigenous owners (Figure 12.3). These people were considered illegal landowners

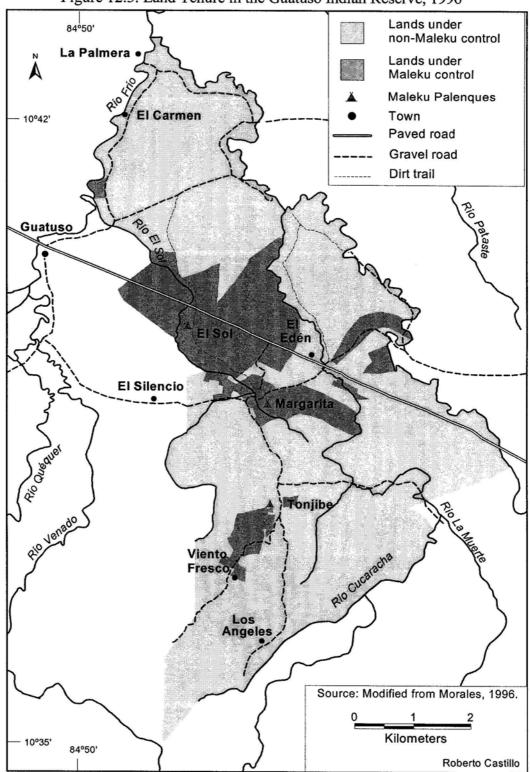


Figure 12.3. Land Tenure in the Guatuso Indian Reserve, 1996

because they took possession of land after the reserve was created in 1976. Therefore, in a 20-year period (1976-1996) the Maleku saw their reserve's lands reduced by about 45 percent.

Lack of Indigenous Law enforcement and of appropriate demarcation of the reserve's boundaries have allowed *mestizo* people to appropriate Maleku lands. The reserve lands held legally and illegally by non-indigenous people have been sold despite the fact that the Indigenous Law prohibits these transactions. Thus, outsiders have come to possess reserve lands. In addition, about 45 percent of the reserve is illegally owned by non-indigenous people who took possession of the land after the reserve was created in 1976. According to the Indigenous Law, the illegal landowners should be removed from the reserve and their land properties returned to the Maleku. However, this has not been done yet. Finally, the lack of physical demarcation of the reserve lands.

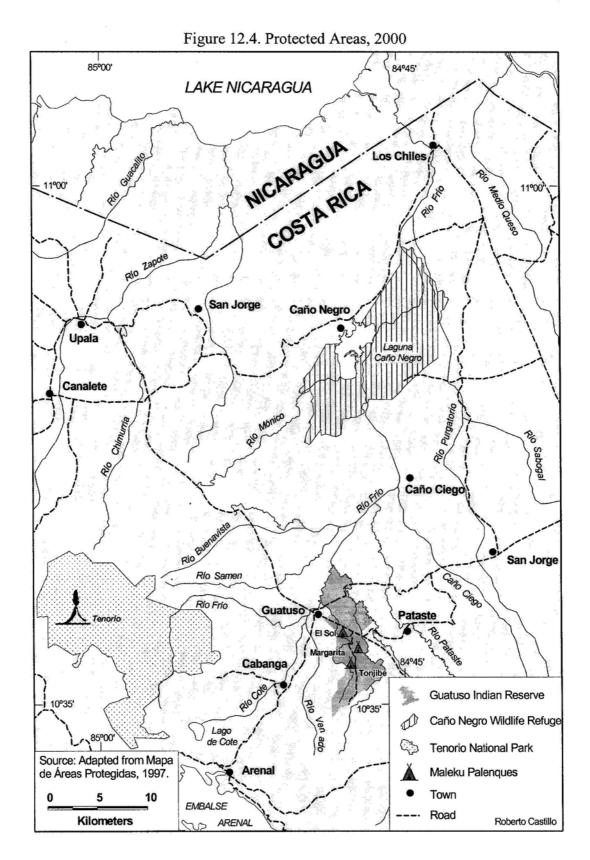
Between 1996 and 2000, the land tenure situation in the reserve remained the same. The Maleku controlled only 20 percent of their reserve lands, and faced the constant threat of invasions by outside land squatters, and the territorial expansionist attitude of *campesinos* living inside the Guatuso Reserve. The Indigenous Law remained inadequately enforced and ineffective. In addition to controlling a small amount of reserve lands, the Maleku faced another problem: land remained unequally distributed among indigenous families. Of the 606 hectares, fifteen families owned 305 hectares (50%), about 40 families concentrated the remaining 301 hectares, and 35 families did not own any land at all (Morales 1996; INEC 2002).

12.2.4 Livelihood

The historical Maleku's subsistence economy based on food-getting strategies such as small-scale agriculture, hunting, fishing, and gathering has been replaced by cash-earning activities. The advancement of the colonization frontier on the Guatuso County and the Guatuso Indian Reserve has been responsible for converting extensions of forest into grazing and farmlands that used to be hunting and gathering grounds for the indigenous peoples. The remaining forest areas located outside and inside the Guatuso Indian Reserve are controlled by non-indigenous peoples, to which the Maleku are not welcome to hunt or gather plant species. Only in sporadic occasions do landowners give permission to particular Maleku individuals to hunt in their properties. Population growth has also increased the competition and exploitation of local wildlife and fishing resources, making it more difficult for the Maleku to rely on game and fish activities.

The Maleku's historic lifestyles were further compromised by the establishment of the Caño Negro National Wildlife Refuge in 1984 and the Tenorio Volcano National Park in 1995² (Figure 12.4). The Caño Negro Lagoon was an important source of fish and game animals that supplemented the Maleku diet for at least four to five months. In the same way, the Tenorio Volcano and surrounding highland areas were also important gathering and hunting areas. With the creation of these two protected areas, which by law it is not permitted the extraction of any species of flora and fauna, the Maleku were not allowed in these protected areas, violating their historical usufruct rights and denying their access. Emma Alvarez, resident of palenque El Sol, referring to the Caño Negro Lagoon, expressed the following in 1992: "God left us that place to hunt turtles and other animals. This is our life. We cannot relinquish that place. It is ours. We fish and hunt turtles to survive, not to sell meat in the market" (La Nación 1992:1B). Another Maleku resident considered that this action was the last blow struck by non-indigenous people against the indigenous culture (Morera 2000:pers.comm.).

Facing land shortages, destruction of forest, depletion of game and fish sources, and losing accessibility to existing protected and private forests and fishing grounds, the Maleku have been forced to adapt and change to new livelihood strategies. For the landless families one strategy is to borrow and rent land from *mestizo* neighbors to grow maize, beans, plantain, manioc, and rice for consumption purposes. Families with access to land grow crops such as maize, beans, plantain, manioc, rice, cacao, and peach palm for consumption and commercial purposes. The earnings from selling agricultural products are usually insufficient to make a living, forcing small landowners to complement their living by working as low-wage peons on farms belonging to *mestizo* neighbors. A few individuals work as primary-school teachers, maids, store clerks, and first-aid attendants. Some families



also make crafts such as carving gourds, drums, arrows and bows, masks, carving animal wood figures, and necklaces to sell to national and international tourists. A few families raise pigs and chickens to supplement their diet and to make some extra money by selling them in the local market. The lack of land and jobs opportunities in the reserve and surrounding areas has pushed Maleku families to leave their communities. According to the population census conducted by the researcher and the three local investigators, by the year 2000 there were 30 Maleku people living and working in different parts of the country, mainly as maids, and construction and agricultural workers. Finally, among the historical subsistence activities, fishing is still a frequent practice by the Maleku, and it plays a significant role in supplementing their diet. Hunting is only sporadically practiced, so its historical role as the main source of meat has practically disappeared. The gathering activity has been reduced to the collection of balsa's trees, mastate tree bark, seeds, gourds, and peach palm wood necessary for making commercial crafts. In summary, with the exception of the 15 Maleku families who have enough land to live off as independent farmers, the rest of the Maleku families must combine several of these livelihood strategies to make a living.

12.2.5 Language

During the 1970s, the Maleku predominantly spoke their native language, but by 1982 Spanish had replaced it as the main spoken language. The transition from one decade to the other marked the replacing process between the two languages. According to the 350 Maleku census in 1987 by linguist Constenla, 86 percent were bi-lingual and 14 percent were monolingual in Spanish (Constenla 1988:10-11). The monolingual in Spanish corresponded to people under 20 years old, who also showed less loyalty to the native language and expressed that Spanish was easier to learn and better than the local language. In addition, among people under 40 years, 71 percent preferred to speak Spanish (Constenla 1988:23).

Elementary education in the Maleku communities has been in Spanish. This has worked against the continuity of the native language, one of the most important elements of identity. However, interested in preserving the indigenous language, the Ministry of Education through its Office of Indigenous Education began in the 1990s a program of teaching the native language in the primary schools, and published a book with a practical alphabet designed to write-and-read the language. In addition, in 1986 was inaugurated the Radio Cultural Maleku in Tonjibe with the intention to promote and preserve the indigenous culture, and particularly their language. This radio station was actually the first one in the Guatuso region. In a few years, the radio stopped airing in the native language, and started programming in Spanish to serve a bigger non-Maleku audience and to attract outside commercial sponsors (La Nación 1986:1B).

These measures have not helped in preserving the native language. The researcher estimated that in the year 2000 the number of Maleku speakers was around 230, representing about 60 percent of the total population. Most of the Maleku under 20 years old are monolingual Spanish speakers, and literacy in Spanish is general among those under 50 years old. Children from marriages between Maleku and non-Maleku partners were not learning the language, and even when both parents speak the native language, they prefer to speak in Spanish to their children. In addition, as contacts with outsiders have increased, the Maleku are being forced to use Spanish more frequently as lingua franca. With the decline in the number of Maleku speakers, other cultural aspects were also affected. People under 20 years old did not have names in the native language, which represented a lost of the traditional religion since names was an important factor that protected people from bad spirits and temptations. This age group also lacked knowledge of oral tradition, the most important means to transmit history, cultural beliefs, and values.

12.2.6 Religion

Maleku religious ideas and practices have declined in the last three decades because of the increasing Christian missionary work. Catholic, Methodist, Baptist, Pentecostal, and Assembly of God religions have built churches in the Maleku communities. Among the positive activities carried out by these churches include reducing the alcoholism problem, supporting community projects such as construction of houses and schools, small productive projects, bringing clothes and gifts, and providing furniture and utensils to schools. These churches, however, have tried to banish local religious beliefs and practices, among them: the preparation and drinking of chicha, the dancing and singing ceremonies, the belief in the existence of several Gods, the good and bad death, the prohibition of eating particular animals (food taboos), and the mortuary customs.

Protestant churches have used the Spanish language to transmit their religious prescriptions instead of using the native language to identify with the local community. This situation has reinforced the introduction and diffusion of the Spanish language to the detriment of the local language. The religious indoctrination process has been effective among younger people (under 40 years old), who reject and ignore autonomous religious practices and beliefs. Despite the outside religious influences and persistence to ridicule and undermine the native religion, elders of the group still retain an oral tradition that reveals practically no traces of Western cultural influence. They also preserve the ancestral system of beliefs and customs, including the practice of burying the dead inside the houses.

During the last three decades, the Maleku have suffered territorial reduction and cultural disruption. Many of their cultural practices disappeared by contacts with Costa Rican colonists, by the actions of the education system and the government institutions, and by the missionary work of diverse religious groups. However, despite these losses, the Maleku still maintain cultural elements such as language, religion, oral tradition, crafts, mortuary customs, common history, and self-identification, which are important elements of their cultural identity. Unfortunately, the future continuity of these remaining cultural elements is threatened not only by the acculturation forces in place during the last three decades, but also by other agents of change. Such as miscegenation, the growing migration of Maleku out of the reserve, the increasing presence of tourists and non-government organization in Maleku communities, the expanding influence of mass media communications, and the numerical dominance of non-indigenous peoples living inside the reserve.

¹ The government of the President Luis Alberto Monge obtained a loan from the Agency of International Development of the United States in 1983 to cover all the expenses required by the regional development program. The geopolitical interest of the United States in the area was to undermine and overthrow the leftist Sandinista government in Nicaragua. In exchange for the financial support of the United States, the Costa Rican government permitted the presence of Contras in the country to train, to get medical attention, to obtain provisions, and to launch military attacks on the Sandinistas. A radio station Voice of America was installed in the region to counter the leftist ideological influence of radio Sandino.

² The Caño Negro National Wildlife Refuge has 9,969 hectares, including a lake, marshlands, and flooded forest. The Caño Negro Lagoon is seasonally flooded by the Río Frío and covers 800 hectares and averaging about 3 meters deep. During the dry season (February to April) the lagoon almost dries up, leaving behind only a few small lagoons and pools. This refuge is important as a wintering site for migrant waterfowl, as well as a year-round habitat for resident wetland species. The variety and wealth of bird life, mammals, fish and reptiles, justified setting it as a wildlife refuge. The Tenorio Volcano National Park was created in 1995 with an extension of 12,871 hectares. The Tenorio Volcano is the second highest elevation of the Guanacaste Mountain Range (1916 meters.). The park presents four life zones: very humid tropical forest, premountain pluvial forest, very humid premountain forest, and low mountain pluvial forest.

13. Conclusions

13.1 Research findings

I focused on one interrelated overall objective and four specific objectives to fulfill the broad aims of the research. The first specific objective was to explore the cultural history of the Maleku indigenous peoples. As discussed in chapter 5, linguistic, genetic, and archaeological studies indicate that the Maleku could be the descendants of proto-Chibcha language speakers that probably evolved in southeastern Costa Rica and western Panama. The gradual fragmentation and dissemination of Chibcha languages northward and southward from this heart probably began some 5,000 years ago, contemporary with the incipient development of agriculture. As a result, of this fragmentation, the territory was divided in cultural blocks, where each indigenous group in relative geographic isolation began to build its own genetic and cultural identity, with no evidence of large migratory movements that would have resulted in dramatic genetic and cultural changes. The linguistic, genetic, and archaeological evidence also suggest that the Maleku and other Chibcha speaking groups have occupied, with some exceptions, the same territories since pre-Columbian times. This position is reinforced by the Maleku oral tradition, which claims that the creation of plants, animals, and themselves occurred on the headwaters of the Río Frío's main tributaries. In conclusion, the Maleku could be considered a Chibcha speaking group, which has lived in the Río Frío's region for at least 5,000 years. My findings refute long-standing hypotheses considering the Maleku as the mixed of distinct indigenous groups, who migrated into the Río Frío area early in the colonial period.

The second specific objective was to explain the Maleku's survival during the conquest and colonial periods. The analysis of the historical documents and the physical geography of the Río Frío watershed demonstrated that the Maleku was not only the last indigenous group to be discovered in Costa Rica, but also one of the three groups to remain unconquered throughout the conquest and colonial periods. Several factors explain this situation. Firstly, the physical geography of Río Frío watershed, dominated by hot, humid, and rainy climate, covered with dense tropical rainforest and swampy-marshy lowlands to the north, and a rugged topography to the south, made the region unattractive, unpleasant,

and not easily accessible to the Spanish conquerors. Secondly, Maleku settlements, located relatively far away from the Spanish population centers in Costa Rica's Central Valley and the Guanacaste region, and from the military forts of San Carlos and El Castillo on the San Juan River, allowed them to avoid Spanish contacts, pirate attacks, and Miskito raids in the 17th and 18th centuries. Thirdly, their late discovery in the colonial period (1778) meant they avoided Spanish contacts, and their devastating actions. Fourthly, the Maleku's armed resistance was successful in keeping soldiers and missionaries away from their lands, retarding any permanent contact and acculturation. Finally, the general perception that the Río Frío region lacked precious minerals and indigenous populations made it unattractive to the Spaniards as a source of wealth, slaves, tribute, and labor.

The third specific objective was to reconstruct the Maleku's culture area, describing the population size, settlement patterns, and subsistence during the mid-19th century using historical sources, participant observation, interviews, and collaborative research. The results show that the Maleku occupied an area of about 1,100 square kilometers that roughly coincides with the Río Frío watershed. This territory contained multiple upland and lowland forest and related-seasonal and permanent wetland ecosystems, with a high diversity of plants and animals, many that were essential for the survival of the native peoples. This historical homeland, considered to be the center of Maleku's origin, was the land inhabited, used, and protected by their ancestors before the Nicaraguan rubber gatherers came in 1868. The different calculation methods used to estimate the size of the Maleku population produced four different estimates 1,040, 1,430, 1,744, and 2,040. These estimations are clearly within the estimation ranges provided by Constenla (1500) and Carmona (2000), and a little higher than those proposed by Thiel (800) and Fernández (600). Thus, in conclusion the Maleku population around mid-19th century could have oscillated between 1500 and 2000 people.

The mid 19th century Maleku population lived in 17 permanent riverine communities or palenques, located alongside the Pataste, Patastillo, and La Muerte rivers. This is considered the core or culture hearth of the past Maleku region based on the ethnohistorical and field research presented in this dissertation. Each community consisted of three or more open large-thatched houses, in which lived an extended family bonded

together by ties of kin or marriage. The extended family household, headed by the oldest male or founder of the family, was the basic unit of production and consumption. Linked by kinship ties and descending from the same family ancestor, the extended families produced close-knit communities that function as autonomous social, economic, and political units. Communities still engaged in cooperative work, celebrations, intermarriages, interchange of foodstuffs, and fishing-hunting trips to the Caño Negro Lagoon. The Maleku oral tradition and some historical sources claimed that a chief warrior existed in the past, which would have enjoyed some temporary limited authority when his abilities were needed for defense. In sum, the Maleku had an egalitarian society. Inter-group stratification was absent among the Maleku groups, community activities were voluntary, and local leaders ruled more by consensus.

Some factors help to explain why the Maleku selected to live in separate riverine palenques. Among social-political aspects were the presence of the extended family as the social and economic domestic unit, the custom to marry outside their communities, the residence pattern of matrilocality, and the absence of a strong structured socio-political system. In addition, palenques were established near rivers to have access to water for domestic purposes, to use the better-drained alluvial soil for agriculture, and to take advantage of the abundance of fish, aquatic life, and game species in the rivers and surrounding gallery forests. Finally, there was need to be close to a river or stream because of the religious belief that river baths helped to wash bad spirits and thoughts, and consequently, purify their souls.

As the ethnohistorical and field research documented, the Maleku livelihood was secured through different subsistence activities such as agriculture, hunting, fishing, gathering, and animal husbandry. Cultivation fields supplied the main staples of the Maleku diet, particularly plantain, tubers, cacao, squash, and peach palm. Game, fish, and in lesser degree animal husbandry activities provided the meat in their diet. They also actively engaged in collecting a wide array of wild resources from local environments for multiple purposes: food, clothing, medicine, house building, firewood, house utensils, music instruments, fishing and hunting tools, and many other uses. In general, food resources were more diversified and widespread during the dry season, so the Maleku spent more time hunting, fishing, gathering, and farming. Conversely, in the rainy season, due to heavy rains, bad weather, and flooding conditions, food resources were more limited in quantity and kinds, so fishing, hunting, and gathering was less important and agricultural production was also limited. The Maleku maintained food supplies during the rainy season through food preservation and storage techniques, through raising wild animals, and through reciprocal exchanges of foodstuffs within the community and among communities.

The fourth specific objective was to document and explain the changes on the Maleku's population, lands, settlements, and subsistence activities over the last 130 years. Since 1868 the Maleku population has plummeted 75 percent. Their ancestral lands have likewise been reduced by 99.45 percent. Predictably, the number of communities declined from seventeen then to three now. The customary subsistence activities of agriculture, hunting, fishing, gathering, and animal husbandry, which were the basis of Maleku's past livelihood, have been mostly replaced by economic market-oriented activities. Four periods were selected to identify the agents or factors contributing to the geographic and cultural changes experienced by the Maleku: a) 1868-1900, b) 1900-1950, c) 1950s-1960s, and d) 1970-2000.

During the first period, between 1868 and 1900, the actions carried out by the Nicaraguan rubber gatherers against the Maleku were responsible for reducing their population from about 1500-2000 to 267 people, and their number of settlements from seventeen to eight. The Maleku also lost lands to Nicaraguan peasants, who by the end of the 19th century, had established three settlements in the area, and had begun to appropriate farmlands, hunting, and fishing grounds historically belonging to the native people. Another outside element that brought changes to the Maleku society was the five missionary visits made by Bishop Thiel between 1882 and 1896. The presence of catholic missionaries were responsible for bringing the native population into the cash economy, for introducing new crops and farming tools, and for encouraging the cultivation of more land for commercial purposes. The introduction of rifles and metal hooks by outsiders replaced some of the Maleku's customary hunting and fishing techniques. In addition, the introduction of western clothes discouraged the wearing of the traditional dress. Language and religion were little

affected by the missionary activities because of language barriers and absence of permanent religious missions among the Maleku.

During the next period, covering the first half of the 20th century, the Maleku population continued declining from 267 in 1896 to 127 in 1923, due to malnutrition, diseases, and a new problem, alcoholism. The decline in population was also attributed to the rubber gatherer actions in the 19th century, which reduced the Maleku to a small population dominated by adult males over adult females and children. The low proportion of women in fecund age might have affected the number of births in the preceding decades, which combined with relative high mortality rates produced a negative natural growth of the native population. The Maleku also experienced loss of lands, particularly located along major rivers because of the Nicaraguan settlement frontier and the development of agriculture and extractive activities. The Nicaraguan colonists used different tactics to take land away from the indigenous peoples. They gave dogs, horses, old rifles, and alcohol to indigenous landowners in exchange for pieces of land, and used intimidation to persuade indigenous landowners to sell their land for ridiculous prices. The dispossession of lands and the extractive activities by Nicaraguan colonists contributed to the disappearance of two Maleku communities, and to the deforestation and disruption of forest areas that were important for Maleku's livelihood.

Between 1900 and 1950 two particular elements of disruption and acculturation of the Maleku were the policemen posted in Guatuso and the first primary school built in this town in 1928. The local authority forced indigenous men to perform tasks and duties against their own will, and came into the indigenous communities to destroy large pottery jars containing *chicha* drinks, banished stick fights, and incarcerated drunkards. With the establishment of the primary school, some indigenous children, particularly from the nearby communities of El Sol and Margarita were forced to attend school, where they learned Spanish and new cultural traits.

During the third period, the decades of the 1950s and 1960s, the Maleku population experienced a meager recovery from 127 people in 1923 to 154 in 1967. High mortality caused by diseases such as malaria, tuberculosis, typhoid, intestinal parasites, malnutrition,

and anemia, as well as the lack of medical attention explained the slow growth. By 1957 the Maleku occupied about 11,000 hectares, according to the reserve established by the government that year. By the late 1960s, however, most reserve lands were controlled by non-indigenous peoples. Lack of legal support, land titles, and territorial demarcation of this reserve allowed Costa Rican and Nicaraguan peasants, and land speculators to appropriate Maleku's reserve lands. In a similar way, Costa Rican and Nicaraguan peasants took over extensive indigenous lands in recent decades, forcing residents to abandon the communities of Juana, Grecia, and El Mango, and to move into the three remaining communities of Margarita, Tonjibe, and El Sol. As a result of the reduction of lands, including forest and wetland resources on which the Maleku depended for subsistence, men and women engaged for the first time in wage labor activities to obtain basic and newly introduced commodities.

The Costa Rican government became also more active in the acculturation of the Maleku through the construction of schools and housing programs. Schoolteachers embarked in an education/civilizing mission, which included not only teaching the Spanish language, but also introducing outside cultural traits such as soccer, beds, wells, latrines, farming tools, and crop seeds. By the end of the 1960s, people between 8 and 25 years old had learned to write and read Spanish. The government sponsored-houses built in Margarita and Tonjibe in 1963-64, which were copies of the Central Valley's models, replaced traditional multi-family habitations, destroying the old time domestic units of large extended families, and threatening the tradition of burying the dead inside the family house.

Over the fourth period of the last three decades (1970-2000), the Maleku population experienced a significant increase from 187 in 1974 to 380 in 2000. The establishment of health centers, school cafeterias, the installation of latrines and aqueduct running water, and the eradication of malaria, measles and tuberculosis helped to reduce the mortality rate, and led to the population increase. The aggressive colonization policy of the Costa Rican government and the development of physical infrastructure and social services in the northern region during the 1980s and 1990s, led to the rapid growth of the population and the deforestation of forest areas. One of the major effects on the Maleku was the usurpation of indigenous lands by newcomers and neighbors. The establishment of the Guatuso Indian Reserve in 1976 with an area of 2994 hectares did not stop the usurpation of reserve lands and the illegal lodging on them. My results showed that the Maleku controlled only 20 percent of their reserve lands today, and that they face the constant threat of invasions of their remaining lands by non-indigenous land squatters.

Most forests of the Río Frío watershed, including the Guatuso Indian Reserve were converted into pastures and farmlands due to the advancing colonization frontier and lodging activity. The few remaining forested areas located inside and outside the Guatuso Indian Reserve today are controlled by non-indigenous peoples or protected by the Caño Negro Wildlife Refuge and the Tenorio National Park as (See figure 12.4). Thus, the Maleku not only lost most of their historical hunting, fishing, and gathering grounds because of deforestation, but they also lost access to remaining forests and wetland areas that they once used. Over time, the Maleku were forced to abandon customary game, fishing, and gathering activities, and they turned to more wage labor and market oriented activities.

Two other elements of Maleku's cultural identity, language and religion lost importance in the last three decades. The number of Maleku speakers declined from 300 in 1987 to 230 in 2000 attributed to the basic education system, miscegenation, the preference of parents to speak in Spanish to their children at home, and the need to use Spanish as contacts with outsiders have increased. The loss of the native language has affected the knowledge of oral tradition, the most important means to transmit history, cultural beliefs, and values. The indoctrination process by Catholic, Methodist, Baptist, Pentecostal, and Assembly of God churches has been effective among younger people (under 40 years old), who usually reject and ignore autonomous religion practices and beliefs. These churches have also been successful in convincing people to give up the preparation and drinking of chicha and the practice of food taboos, and are still trying to banish traditional mortuary customs.

Finally, the overall objective of this dissertation was to explore the relationship between land and indigenous cultural identity. The main purpose, using the Maleku case, was to show how a small indigenous group has survived and maintained their cultural identity despite losing practically all their historical lands and resources. The Maleku survival and unique cultural identity, at least until the arrival of the Nicaraguan rubber collectors in 1868, was the result of a long and close association with their historical lands. The customary ways of subsistence, their religious beliefs and practices, their language, the organization of their social and political lives, the very essence of their existence depended upon the forests, rivers, lagoons, and wetlands of the Río Frío watershed, which they inhabited for, literally, thousands of years. This territory provided them with everything they needed to survive physically, culturally, and spiritually. Practically every aspect of their life was related to the land and resources. The Maleku relied upon a mix small-scale agriculture, hunting, fishing, and gathering of forest and riverine resources. The natural resources provided all the materials needed to cover primarily basic needs such as food, housing, clothing, medicines, cooking and eating utensils, carrying bags, and hunting, fishing, and farming tools. The knowledge accumulated for generations about plant, animal, and climate behavior, served the Maleku to adapt their customary methods of survival to the local ecosystems.

The close relationship among the Maleku and with their environment for at least 4,000 or 5,000 years produced distinctive religion and language. My fieldwork and archival research showed that the Maleku believed in the existence of several gods, who lived in river headwaters, rivers, waterfalls, and lagoons that are considered sacred places. In these sacred places, the gods created the Maleku, the plants, the animals, and everything on earth. The ecological dimension of this religion pointed toward the appropriate exploitation of and use of forest and animals, and the non-consumption of some animals considered food taboos. The Maleku ascribed all misfortunes and sickness to punishment from these gods when these rules were not followed. Thus, the traditional religion promoted the conservation of sacred areas, animal species, and portions of landscapes through the influence of its beliefs, values, and rituals toward nature. The native language reflects in its vocabulary the rich diversity of plants, animals, and water features that characterize the Río Frío watershed. The Maleku developed complex classification systems of plant and animals that are stored in their native language. Most of the toponyms used by the Maleku to describe places or sites involve the presence of water. This situation is related to the dominance of the lowland's landscape by water features such as rivers, streams, creeks, lagoons, swamps, and

wetlands, which reflect the importance of these water bodies on the livelihood and religious beliefs of the Maleku.

The Maleku lived in small-dispersed riverine communities, which were in part an adaptation to the lowland tropical conditions and to the spatial availability of valuable resources such as fertile alluvial soils, game, fish and aquatic resources, and forest materials. Without wanting to sound like a geographic determinist, the settlement and subsistence patterns contributed in some way to the development of a strongly independent, egalitarian, and non-coercive Maleku society, and vice versa. Certain older men by virtue of their kinship ties and personal attributes emerged as natural leaders of their respective communities. The opinions of such individuals were respected and influential, but not binding.

Other material culture elements such as types of houses, beverages, cookware utensils, music instruments, and dress were in some way connected to the local environment. The large multifamily houses open at the sides and with thatch roof were well adapted to the hot and humid conditions of the region, and to the abundance of building materials. Popular alcoholic beverages or *chicha*, used in community celebrations, were made from four different crops produced in the area: maize, peach palm, manioc, and plantain. The elaboration of typical large pottery jars for making *chicha* and small cookware required a special type of red clay found only in two specific sites of the Río Frío watershed. Clothing was made from the bark of a specific tree called *mastate*. Music instruments such as drums made of cedar wood and iguana skin, maracas made of gourds, flutes of wild canes, and whistles of clay, also showed the intimate and close relationship of the Maleku material culture with their local resources.

Until about 135 years ago the Maleku were culturally distinct, relatively isolated, and largely a self-sufficient indigenous group. Today, engulfed by *mestizo* population, who have migrated to the Río Frío watershed in search of agricultural land, the Maleku have become enmeshed in the economic, social, and cultural fabric of wider Costa Rican society. For this the Maleku have paid dearly: they lost almost all their lands and resources, their population and settlements declined significantly, and those who remain have lost some

elements of their original cultural identity. However, they still managed to survive physically, and to maintain important cultural elements such as language, religion, oral tradition, burial customs, crafts, and a strong self-identification, which all help define their present cultural identity.

Two questions about the particular situation of the Maleku should be addressed. The first is how the Maleku have survived despite losing most of their land and natural resources? The second question is how have the Maleku been able to maintain their indigenous cultural identity? One may expect that when the ownership and access to crucial lands and natural resources are lost, the Maleku would lose their chances of cultural survival.

Since the end of the 1970s, the Maleku practically lost all their traditional means of livelihood, which included lands for agriculture, and forests, rivers, and lagoons for hunting, fishing, and gathering activities. Today, the Maleku control only 606 hectares of reserve lands, which are not enough for most families to make a living as farmers, including at least 35 families with no access at all to land. In terms of material or physical survival, the Maleku have been able to compensate for the lack of land, resources, and traditional livelihood, by adapting to the needs of the dominant cash economy. During the last three decades, they engaged in wage labor, mainly working as peons and maids on nonindigenous neighbor farms and houses, as store clerks, teachers, and health assistants. Families with small pieces of land combine subsistence agriculture and the sale of a small surplus of cacao, maize, beans, and peach palm. A strategy for families without land has been to rent land from non-indigenous neighbors to produce crops for subsistence and commercial purposes. More recently, the Maleku are involved in making and selling crafts (drums, arrows and bows, masks, incised gourds) to tourists. In the community of Tonjibe two traditional houses have been built to display the crafts and to entertain the visitors by the local theater group, which recreates aspects of the group's culture history. The assistance of state institutions has played a significant role in the Maleku survival through financial aid, pensions, food programs, and free health insurance. Non-government organizations have also contributed with the development of small productive projects of chickens, pigs, iguanas, bees, and cattle. Although these economic activities and the financial aid received from government and non-government organizations generate low earnings, they have given the Maleku the opportunity to remain in the reserve's communities.

In terms of the second question, there are some factors that may help explain why the Maleku still maintain a distinctive cultural identity. One important factor is that the Maleku cultural identity today is based primarily on non-material culture elements. The plundering of the Maleku lands and resources and population reduction over the last 130 years affected more material than non-material culture elements. While houses, dress, customary subsistence activities, music instruments, cookware and house utensils, stick fights, and body adornments disappeared, other non-material aspects such religion, language, oral tradition, and burial customs have survived until today. The survival of these non-material elements are related to the relative isolation enjoyed by the Maleku communities, the weak religious and missionary involvement, the bilingual education programs, and a local self-identification movement interested in preserving its cultural identity. The continuity of these non-material culture elements has played a fundamental role not only defining the present Maleku's cultural identity, but also keeping alive the cultural and spiritual links with their ancestral lands. The Maleku still possess an excellent knowledge and sense of attachment to their historical lands that have been stored and transmitted from one generation to the next by language, religion, and oral tradition. This explains why the Maleku still know about past locations and names of settlements, subsistence areas, water and relief features, about customary subsistence activities and biological knowledge, about ways of living and relating with the natural world, about religious beliefs, sacred places, rituals, and spiritual leaders, about sociopolitical organization, and the history of the group. With the material bases of the culture (lands and resources) almost gone, the language, oral tradition, and religion are holding the keys to the Maleku cultural identity. They are giving the Maleku the power and knowledge to affirm connections with their historical lands and past culture.

Another factor is that the umbilical cord connecting the Maleku to their ancestral lands and resources has not been entirely cut. A few families still live off their small properties on the Guatuso Indian Reserve as farmers. People are involved in gathering wood, seeds, and gourds in the remaining forests, located beyond the reserve's boundaries for making tourist crafts. The Maleku still practice fishing on nearby rivers, but its contribution to their subsistence is insignificant. Nevertheless, these surviving activities allow the Maleku to keep some physical and spiritual contact with a small part of their historical land, water, and forest domains, providing them with some sense of closeness and belonging to the place and some cultural continuity with the past.

The fact that the Maleku remain within the Guatuso Indian Reserve, and especially living in relatively isolated, closed, and cohesive communities have contributed to their cultural survival. Until the 1980s, the Maleku communities were relatively culturally and socially isolated from the rest of the neighboring *mestizo* communities. The communities were exclusively inhabited by Maleku, who usually married among themselves, and disliked the presence of outsiders. This particular situation helped the group to preserve cultural aspects such as language, religion, burial customs, and oral tradition, and to develop a selfidentification as an indigenous group. Unfortunately, the cohesion of the communities began to fragment in the 1990s with the establishment of different churches and intermarriages with outsiders.

The establishment of the Guatuso Indian Reserve in 1976 has contributed also to the cultural survival of the Maleku. Although the Reserve has been inefficient in protecting indigenous lands from being taken away by outsiders, without its presence probably the Maleku would not exist today as an indigenous group. The legal figure of the reserve has helped prevent outsiders from overtaking the entire protected area, and particularly the lands surrounding the three Maleku communities. In the 1990s, the Maleku became more aware of the legal issues concerning their rights to reserve lands and their broader cultural rights as an indigenous people. Since then, they have been more active in controlling the usurpation and selling of reserve lands to outsiders. They realize that the Guatuso Indian Reserve was their best chance for maintaining remaining lands. Their hopes began to aim at regaining some lands back. Although the Maleku control only a small amount of the reserve, they know that the entire reserve was created for them, and it legally belongs to them according to the Indigenous Law of 1977. This is a powerful symbol of identity that has given them sense of pride and respect for their culture, and some sense of belonging and attachment to the area, inhibiting people from leaving the reserve. Although, in material terms the reserve is not

controlled by the Maleku, it continues to be part of their historical lands, where their ancestors lived, died, and are buried, and where their particular cultural identity developed.

Finally, in the last two decades, the Maleku have asserted an indigenous cultural identity because they have gained by doing so. They have realized that to be considered indigenous people with their own distinctive cultural identity could bring some benefits to the group. As an indigenous group, the Maleku have received financial aid and some privileges from the government, they have captured the attention of potential donors to develop social and economic projects in their communities, and they also have become an attraction for tourists. Moreover, a collective identity has helped them to claim land rights over the reserve. These benefits have served as a powerful stimulus to develop a common identity under the name of Maleku and based on self-affirmation or identification, a shared history, and what is left of their original culture. For this reason, the attitude of the Maleku is now more positive than before toward the preservation of cultural elements such language, religion, oral tradition, burial customs, and crafts.

One cannot help but wonder what is going to happen to the Maleku in the future? There are three major threats faced by the Maleku today that, if not addressed properly, would probably lead to their disappearance as an indigenous group. One of the reasons for the Maleku to maintain their cultural identity has been to remain in their communities and reserve. Lack of land has not been yet responsible for pushing them out of their communities. Only about 30 Maleku people (8%) live outside the reserve today. The vast majority still remain in the area because of the income received from low-paid jobs, marketoriented activities, small-scale productive projects, and financial aid received from government and non-government institutions. The Maleku population is increasing, which combined with the limited prospects of getting reserve lands back, and the lack of job opportunities is threatening people to leave their communities (Blanco et al. 1996; Mejía, Jaen, and Mojica 1996:2; Semanario Universidad 1995:9). Certainly, the Maleku must continue with the economic activities that have provided their livelihood until today, but also must expand and explore new living possibilities. Some examples include the production of crafts and organic products such as medicines, soaps and shampoo, work in cultural and ecotourism, work as teachers in their own schools, and the development of small-scale productive projects. For the Maleku to remain in their communities and have a chance to maintain their cultural identity, they must re-gain reserve lands. One possibility is to buy reserve land using donations from international development agencies. Another possibility is to invade properties owned by non-indigenous people in the reserve (this happened in 1990), forcing the government to expropriate and purchase the land and distributing it among Maleku families.

The establishment of different churches such as Catholic, Methodist, Pentecostal, Adventist, Baptist and others are seriously threatening the continuity of ancestral religious beliefs, burial customs, values, and traditions. They are already responsible for convincing the Maleku to give up the preparation and drinking of alcoholic beverages or *chicha*, for banishing food taboos, and for attempting to destroy the tradition of burying dead people inside their houses. The evangelizing work has been particularly effective among younger people, who usually do not identify with the native religion. In addition, the evangelizing work is done in Spanish instead of in the native language. The older generations (50 years and older) still preserve their customary religious beliefs but are unable to pass them onto the new generations because they rejected them. For this reason, it is likely that when the older generations pass on, they will take their religious knowledge with them. The possibilities for preserving it include studies on the Maleku religion, and if some kind of native religious revival occurs among the Maleku within the next 20 years.

The intermarriage between Maleku and non-Maleku individuals has become more common during the 1990s. On the one hand, there are cases of Maleku people leaving their communities for marriage reasons, usually not returning to their communities and leaving behind their indigenous identity. On the other hand, more outsiders are moving into the Maleku communities for marriage reasons. The communities once cohesive and homogeneous are becoming more and more heterogeneous. About 30 percent of the families are the product of the mixture of Maleku and non-Indian unions or marriages. The children of these parents make up 15 percent of the total Maleku population today. Most of these children are not learning the native language at home with their parents, where Spanish is used instead. The teaching of Maleku language at schools apparently has not been enough to allow these children to learn the native language. *Mestizo* children who do not speak the

native language are not considered truly Maleku by the rest of the community. The tendency in the future is for more mixed marriages, which will make it difficult for the Maleku to maintain their native language.

In conclusion, the Maleku cultural survival is uncertain. Even if the Maleku were able to remain in their communities without land, crucial cultural aspects such as language, religion, oral tradition, and burial customs that defines their cultural identity today, will be probably gone in about 30 or 40 years because of religion indoctrination and miscegenation. These elements will no longer be passed onto sufficient children to ensure their survival. Therefore, the spiritual, cultural, and historical connections to the ancestral lands, ancestors, stories, myths, traditions, and values that evolved for thousands of years may soon be lost forever.

13.2 Contributions

This research makes some contributions to the discipline of cultural geography and to the Maleku people themselves. In terms of cultural geography, four contributions are identified.

1) The study of the Maleku indigenous people gave me the opportunity to explore, although not in detail, the relationships between land and indigenous cultural identity. As documented in the Maleku case, over the last 130 years the reduction of historical lands and resources has resulted in cultural loss, particularly of culture material elements. Today, the Maleku still control a small portion of their ancestral lands, including lands surrounding their communities. They also have limited access to river and forest resources, where they sporadically fish, hunt, and collect forest materials for making crafts. This physical and spiritual connection between the Maleku and parts of their ancestral lands play a significant role in their cultural survival today. However, if the Maleku lose the last pieces of their historical lands and the access to river and forest resources, they have little chance to survive as a distinctive indigenous group. This finding agrees with the general rule or preconception establishing that indigenous peoples without land and resources are practically impossible to survive. This research in some way called the attention for future investigations in cultural geography concerning the specific relationships between indigenous identity and land, particularly when this topic has been little studied by geographers working with indigenous peoples in Central America.

2) This dissertation research used a mixed methodological approach, combining detailed archival work with intensive field research methods such as direct and participant observation, interviews, and collaborative research methods that involved the researcher and local investigators working together in the data collection process. This methodological approach proved to be useful for reconstructing past Maleku's culture area, population, settlements, and customary subsistence activities, for documenting the changes undergone by these four aspects through time, including the processes causing such changes, and for explaining their present cultural survival as an indigenous group. Therefore, it is suggested that similar ethno-geographical studies of indigenous peoples in the future could use and improve this methodological approach.

3) In Central America, and particularly in Costa Rica, there are still indigenous groups that have received little scholarly attention from geographers and other scholars. This study makes an important contribution to the general knowledge and understanding of the past and present situation of one of the indigenous peoples in Central America.

4) The Maleku provide a unique example in Central America of an indigenous group that has been able to survive amid great change and disruption over the past 130 years. Through studying the various ways in which the Maleku people have attempted to ensure their cultural survival, we can learn lessons about the creativity of cultural adaptation and preservation and the obstacles that still threaten these peoples. Maleku's history of persistence and struggle gives some insights into the factors explaining cultural change and continuity among other indigenous peoples. In this sense, this study makes a contribution toward the understanding of the different patterns of indigenous population size, distributions, and cultural survival in Central America today.

This dissertation research contributes in two different ways to the Maleku indigenous peoples.

1) The information about the Maleku is very scant and highly dispersed. This study offered the opportunity of collecting and producing a broad range of valuable geographic, ethnographic, demographic, socioeconomic, cultural, and cartographic information on this indigenous group. The idea is to compile the results of this research into a book in order to make it available to the general public, and especially to the Maleku. Copies of the collected information such as maps, newspapers, transcribed interviews, historical documents, pictures, and contemporary written sources will be given to community leaders and school teachers. In the near future, the researcher will work for the establishment of a documentation center, where all this information and new data could be stored for the use of the communities. It is expected that this information will be used by the Maleku and proindigenous organizations in their legal struggle not only to recover and secure historical lands, but also to regain access to fishing resources in the Caño Negro Wildlife Refuge. In addition, it is expected that this information would serve as a sound foundation for future studies on the Maleku indigenous peoples.

2) One of the most unique contributions of this research was the documentation of many historical aspects of the Maleku society and culture no longer in practice or in existence today, which are not available anywhere. This study contains descriptions of land use systems and knowledge of natural resources; reconstructions of historical lands, settlements, population, and native toponyms; describes the social and political organization, celebrations and customs, and material and non-material culture elements; and narrates the history of the group, emphasizing cultural changes and continuity as a result of their contacts with outsiders. This type of information is important not only to explain the present situation of the Maleku people, but also to make knowledge available to younger native generations to strengthen their cultural awareness and identity. Depending on what happen to the Maleku in the next 30 or 40 years, this information could become one of the important sources for the Maleku and those interested in them to learn about their culture and history.

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