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The Inca Occupation and Forced Resettlement in

Saraguro, Ecuador

A Dissertation submitted in partial satisfaction of the requirements

for the degree of Doctor of Philosophy in Anthropology

by

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Saraguro, Ecuador

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DEDICATION

To my first daughter, Lily Rowan, who, during her short time with us, showed us how wonderful life can be

and

to my second daughter, Lia Willow, who brought hope back to our lives.

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ABSTRACT

The Inca Occupation and Forced Resettlement in Saraguro, Ecuador

by

Dennis Edward Ogburn

This dissertation presents an archaeological and ethnohistorical examination of the Inca occupation of the Saraguro region in the southern highlands of Ecuador, with the objective of exploring the strategies of expansion and maintenance employed by pre-industrial empires, and the role played by forced resettlement within those processes. These issues were addressed by assessing the sociopolitical, economic, military, and other conditions encountered by the Incas in the Saraguro region and analyzing how those conditions may have influenced the strategies the state pursued in the conquest and consolidation of control over the area.

Two sources of data were utilized to explore these issues in the context of Saraguro. First, a field survey was conducted to collect data on settlement patterns, architecture, and artifacts from the Integration Period (ca. A.D. 500 to ca. A.D. 1460) and the Inca Period (ca. A.D. 1460 to ca. A.D. 1534). Second, ethnohistorical documents from the sixteenth and seventeenth centuries were examined for information regarding the pre-Inca inhabitants and the nature of the Inca conquest and occupation of the area. A total of thirty-eight sites dating to the Integration Period and six Inca imperial sites were recorded during the survey. The pre-Inca settlement patterns indicate that the region was probably not unified politically, but organized into separate chiefdom-level societies, with a generalized economy. The inhabitants also appeared concerned with warfare, as indicated by the establishment of settlements on terraced hilltops. After taking over the region, the Incas imposed direct state control, as indicated by the establishment of administrative centers, the construction of storehouses, and the creation of ceremonial sites. Although the survey data did not reveal any convincing evidence of resettlement in the Saraguro region, the settlement patterns suggest that the Incas may have placed colonists within existing habitation sites. Overall, the relatively high level of investment by the Incas in the region may have been connected to its strategic location within the Inca road network and its proximity to the important center at Tomebamba.

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NOTE REGARDING PDF VERSION OF THIS DOCUMENT

Every effort was made with this version of this dissertation to preserve the formatting and image quality of the official version on file at the University of California Santa Barbara and at University Microfilms. The contents of the two versions of the document should be identical with only two exceptions: 1) This page, and 2) The site boundaries for site Sar-42 were erroneously left out of Figure 8-1 on page 305 of the official version, but have been included in this version.

CHAPTER 1: STATE-DIRECTED RESETTLEMENT IN EARLY EMPIRES

It has been claimed that the native people of Saraguro in the southern highlands of Ecuador wear black as a lasting sign of mourning for the death of the Inca Atahuallpa. Whether this is a tradition deeply rooted in history or a more modern attribution, this saying indicates a perceived connection between the modern indigenous Saraguros and the Incas who controlled the area before the Europeans first arrived in the sixteenth century AD. In fact, the Incas may have been directly responsible for the modern Saraguros living in this region; local oral tradition holds that the Incas brought in a group of people from around either Lake Titicaca or Cuzco to replace the previous inhabitants of the region, who had been uprooted and moved elsewhere. Today, the Saraguros express many connections with an Inca past, through oral traditions, dress, language, ceremonies, and other practices. It is within this cultural setting that I conducted archaeological field work from July, 1994 to April, 1995.

The project has two objectives. The first is to study the processes of imperial expansion and maintenance, including methods of territorial acquisition and strategies for consolidating control over those territories and extracting goods and services from them. This topic is approached by evaluating local conditions encountered by the expanding empire, and how those circumstances influenced the strategies employed. In Saraguro, examining the Inca occupation in light of the circumstances found in the province just before their arrival should illuminate how and why the Incas chose particular strategies to annex and consolidate control versus alternative methods. This analysis builds from the territorial-hegemonic model of imperial expansion and maintenance, and is framed within the knowledge of the particular workings of the Inca Empire as derived from ethnohistorical and archaeological research. Through

this approach, the results of this study should add to the growing base of knowledge of how and why the Inca Empire in particular, and ancient empires in general, expanded and maintained themselves.

The first objective is essentially a broader assessment in which to situate the second, more specific goal, which is a theoretical and methodological exploration of one of the major tactics employed by early empires: the forced, permanent relocation of large numbers of people. As a general topic, forced resettlement has received little attention archaeologically, and while ethnohistorical studies have revealed particulars of this practice under the Incas, there is little material data to complement it. The goal here is to explore the theoretical aspects of forced resettlement while developing methodological criteria for recognizing the presence of these relocated communities in the archaeological record, with Saraguro serving as a case study. Ideally, the theoretical and methodological frameworks derived could serve in the study of forced resettlement as an imperial strategy not only in other parts of the Inca realm, but in other locations where early expansionist states held sway.

Practically any region of the Andes that was known to have been part of the Inca realm, and even those lying just outside, could be a suitable study area for exploring strategies of expansion and maintenance in early empires. But because the particular issues that can be addressed in any given area are limited by the nature of the Inca presence there, Saraguro has a number of points in its favor as a suitable location for the exploration of forced resettlement as a specific strategy of imperial general processes of conquest and consolidation. First, several imperial Inca sites are located in the area, which indicates a direct, if not substantial, imperial presence. Second, Saraguro was located along the main north-south Inca road between Cuzco and Quito, the most important route in the Inca road system. Third, it was known to

have been incorporated into the Inca Empire in the earlier stages of imperial expansion, which would have given time for Inca policies to have been fully implemented, but late enough such that many standard practices already had been developed. Fourth, the oral traditions strongly suggest that the Saraguro region was subjected to resettlement under the Incas, perhaps to the extent of total population replacement.

This study integrates both archaeological and ethnohistorical evidence to examine these issues in Saraguro, framing them within the greater context of Andean prehistory and our current archaeological understanding of population movements and the processes of imperial expansion and maintenance. To implement the theoretical and methodological framework in the Saraguro region, the field component consisted of a regional survey geared toward collecting a range of data on settlements patterns, artifact distributions, and architectural traits from all sites dating the late pre-Inca period and the time of the Inca occupation. As an exploratory project, the analysis is aimed at detecting major changes in these data rather than focusing on fine-scale analyses of particular artifact types, etc. These field data were supplemented by an assessment of the available ethnohistorical and archaeological information pertaining to the region.

The resulting dissertation is laid out in the following manner. This chapter presents the theoretical basis of the project, beginning with a short review of conceptual approaches to early empires focusing on the territorial-hegemonic model, which is the most suitable for examining the issue of forced resettlement. Building from that perspective, I present a theoretical framework to explore the major variables that may factor into the decision-making process when an empire chooses to relocate its subjects, the advantages and disadvantages of the many choices to be made, and

how they relate to overall imperial strategies of conquest and consolidation of control. Chapter 2 examines forced resettlement within the Inca realm, as understood mainly through ethnohistorical studies and limited archaeological explorations, and organizes the discussion of Inca resettlement practices around the major variables set forth in Chapter 1.

In Chapter 3, I cover the setting of the project, including a discussion of the composition of the different cultural groups currently inhabiting the Saraguro region and a description of the physical environment, i.e., the range of geographical, geological, climatic, and ecological conditions encompassed by the project area. Chapter 4 comprises an examination of available ethnohistorical information relevant to the prehistory of Saraguro, and especially the period of the Inca occupation, with the aim of gaining information to complement the archaeological data and guide the research. Sources consulted include the major Spanish chronicles, regionally specific accounts, and lesser-known documents that have been published or made available through scholarly manuscripts. Chapter 5 provides a discussion of the prehistory of the region and previous archaeological work in the area. It also places the prehistory of the Saraguro region within what is known from regions further to the south in the province of Loja and to the north in the provinces of Azuay and Cañar, and within the general scheme of Ecuadorean prehistory.

Chapter 6 outlines the research design for investigating forced resettlement as an imperial method of control and the resultant field implications for the Saraguro region, and details the methodology employed in the survey based on the field conditions and the project goals. The results are presented in the next two chapters, with Chapter 7 focusing on the late pre-Inca era and analyzing the conditions that were likely to have pertained upon the arrival of the Incas, and Chapter 8 focusing on

the Inca Period and the nature of the Inca Imperial occupation. The final chapter presents the conclusions of the endeavor and some questions meriting further investigation.

EARLY EMPIRES: THEORETICAL PERSPECTIVES

Early empires represent some of the most socially, politically, economically, and geographically complicated societies encountered by archaeologists. As is often the case, we have looked to other fields such as history, political science, and economics, to borrow theoretical approaches for the analysis for these complex expansionist states. The notable models include:

- The core-periphery model, which developed out of the world-systems paradigm (Wallerstein 1974), and focuses on the economic exploitation and political domination of subordinate *peripheral* polities by an elite *core* polity.
- The tributary-capitalist perspective, which derives from Wolf's (1982) work, and is essentially a Marxist analysis that focuses on modes of production.
- The set of models focusing on metrocentric, pericentric, and systemic motivations of imperial expansion, as classified by Doyle (1986:29, 123-128).

These perspectives have their advantages and disadvantages, which have been discussed by D'Altroy (1992), Sinopoli (1994), and others, and will not be detailed here. Suffice it to say that they are limited in their focus on understanding the causes of imperial expansion and the dynamics of economic relations. To broaden the understanding of the complex dynamics of early empires, there is a need for an

approach, as seen in the research of Schreiber (1987, 1992) and Sinopoli and Morrison (1995), that can address the diverse strategies of consolidation and control of imperial provinces while taking into account the range of spatial and societal variations that can be confronted by expansionist states.

An appropriate framework for addressing early empires in this manner is the territorial-hegemonic model, which developed out of the work of Luttwak (1976) and Hassig (1985, 1988), who analyzed the processes of expansion and maintenance in the Roman and Aztec Empires, respectively. At the fundamental level, the model posits two extremes of imperial control, the direct *territorial* method, wherein the empire establishes its own administrative and control framework within the province, and the indirect *hegemonic* method, wherein it leaves intact the local political system, but still extracts resources and tribute. These two strategies of political control have long been recognized and characterized in other terms, such as *formal* and *informal* methods of rule (Doyle 1986:130), which correspond to *territorial* and *hegemonic* arrangements, respectively. But the territorial-hegemonic framework is more explicit in elaborating the political, economic, and military strategies that are the cornerstones of each strategy of control. According to the model, the territorial empire invests heavily in administration and the military, holding a tight reign over the provinces, which are less likely to rebel. The military is devoted to expanding the empire, but a great investment is also made in protecting the borders of the empire against external threats. Army garrisons are placed among the provinces to exert control, and uprisings within the heart of the empire are infrequent. In contrast, the hegemonic empire invests less in control through direct administrative systems, relying instead on local political systems to maintain internal control and provide tribute, while the military is smaller and more mobile. The outer provinces are responsible for their

own perimeter defense from external dangers, reinforced by imperial troops when necessary. The individual provinces in a hegemonic system are more likely to rebel, but the military is flexible enough to respond to threats as they arise. Periodic insurrections are to be expected in this system as a trade-off for the lower overall investment required of the dominant polity (Hassig 1985:99-100).

A major distinguishing feature of these two methods of control are the amount of investment required of the ruling elites to maintain control of the provinces, and the level of return on that investment in the way of goods and labor. A territorial empire invests much more, and consequently gains considerably more than does a hegemonic empire (Hassig 1985.:99-100). The crucial aspect of both systems is that the overall benefits should outweigh the costs, and as a basic corollary, the system should be able to maintain itself as long as that ratio remains favorable to the state.

While appearing to set up a dichotomy of imperial strategies, the territorialhegemonic model actually comprises a continuum of strategies between the extremes of modes of control and exploitation (Hassig 1985:100), allowing for flexibility in the application of strategies and for their alteration through time. Indeed, Hassig (1985:104-105) points out that the Aztec Empire, which he characterized as a successful hegemonic empire, used both indirect and direct methods of control in its provinces, depending on both local circumstances and the needs of the empire at the time. Furthermore, overall philosophies of imperial control are not conceived of as static once instituted, as illustrated by Luttwak's (1976) analysis of the Roman Empire, a state which transformed over the centuries from a hegemonic system to a territorial one. In such ways, this model allows us to conceive of empires as making decisions and choosing strategies suited to each region according to the particular circumstances in time and space. The territorial-hegemonic model is remarkably

flexible, allowing us to address variations in politics, economics, cultures, environments, etc., and is therefore very useful for framing the archaeological investigation of ancient empires.

Applying the approach to understand the processes of imperial expansion and maintenance in a given province entails the evaluation of the potential strategies in terms of their costs and benefits in light of prevailing conditions:

A key element of the model is a focus on the costs, benefits, and effectiveness of various strategies, ranging from clientage and provincial annexation to retrenchment. Because conditions vary spatially and temporally, differing combinations of military, political, and economic power become more or less secure and cost-effective. Imperial strategies can therefore be assessed partially as calculated plans and partially as ad hoc responses to changing circumstances, given the participants' incomplete information and often hazy understanding of the consequences of many actions [D'Altroy 1992:19].

It could be argued that we cannot assume that imperial elites explicitly aimed at costeffectiveness. However, they must have made decisions that were, on the whole, more beneficial than costly, because the nature of imperial expansion requires that the gains from acquiring, integrating, and holding territories must outweigh the expenditures or else the state structure would exhaust its economic base, become incapable of controlling the provinces, and collapse.

While it may be surmised that, on the average, early empires employed costeffective methods, it is quite possible that some experienced prolonged periods of inefficiency. For example, initial inefficiency of government could be a motivation for increased expansion, where additional territories are acquired with the aim of making up for lost expenditures. Even if this is an early motivating factor, imperial methods must quickly switch to more efficient modes or the expansion phase would soon come to a halt. On the other end of the timeline, inefficiency caused by overextension can be a major cause of imperial collapse, generated when the return from the provinces is far outweighed by the investments being made to maintain the empire as a whole (Yoffee 1979, 1988). In such a way scale becomes an adversary, as the farther one gets from the imperial heartland, the more difficult it is to acquire and administer territories, and costs of transportation and communication become prohibitive. In contrast, it is also likely that as empires develop, their experience over time and in differing circumstances leads to more efficient strategies of consolidation and control The example of the Roman state suggests that over time empires become increasingly territorial, intensifying the level of control over the provinces, while increasing the amount of goods and labor extracted from them (Luttwak 1976). On the whole, flexibility in implementing strategies is beneficial to the maintenance of empire, and those empires with the longest life spans would, in general, be adaptable and efficient in their methods of control. Conversely, those with short lifespans may have become grossly inefficient, although other factors could have led to their untimely demise as happened with the Spanish conquests of the Aztec and Inca Empires.

RESETTLEMENT AS AN IMPERIAL STRATEGY

In pursuit of their primary goals, the conquest of new territories, the consolidation and maintenance of control over them, and the extraction of goods and labor from those lands and their inhabitants, all empires employ the strategy of relocating large numbers of people. Many such movements are temporary in nature, with people being allowed to return to their original homes after their assignments are completed. Still more are permanent, with movement over only a short distance, where those involved remain within or close to their native social, cultural or political sphere. But those relocations that are both permanent and long-distance in nature are

on another level altogether, and consequently more costly and more drastic in their effects.

Long-distance, permanent resettlements are known to have occurred in many, if not all, early empires. For example, in its early stages, the Roman Empire settled ex-soldiers in its provinces, using those colonies as an instrument of control. Julius Caesar is recorded to have regularly settled retired soldiers in lands outside of Italy, while the emperor Augustus also established 28 similar colonies of discharged veterans; these settlements served as "a ready-made militia of ex-soldiers and soldiers' sons who could defend their home towns in the event of attack and hold out until imperial forces could arrive" (Luttwak 1976:19). In the New World empire of the Aztecs, the Emperor Ahuitzotl ordered the three cities of the Triple Alliance to send colonists, supplemented by people from other cities, to settle the domains of Teloloapan, Oztoman, and Alahuiztlan (Durán 1994 [1581]:344-348). In the first city, the colonists served as a garrison of soldiers among the natives (Hassig 1988:208), while in latter two, they essentially served to replace the decimated population and ensure the continued supply of tribute from the cities (Durán 1994 [1581]:344-348). But, as will be discussed in Chapter 2, perhaps no ancient state altered the ethnic landscape within its territory as drastically as did the Inca Empire, where many thousands of people were relocated over hundreds of kilometers across the expanse of the imperial domain.

Although it has been a widely-used strategy, relocation has not been uniform in practice. Variation has been great because governments move people for a variety of objectives, while addressing myriad issues of economics, logistics, politics, etc. As such a flexible weapon in the imperial arsenal of tactics of expansion and maintenance, forced resettlement is well-suited to analysis within the framework of

the territorial-hegemonic model of empire. The high costs involved in relocation and the direct involvement of the state brand it a territorial strategy, but it is not strictly limited to territorial empires. Hegemonic regimes may also resort to resettlement in circumstances where alternative tactics would mean even greater expenditures.

In applying the territorial-hegemonic model of empire to this process, I follow two guiding principles. First is the assumption that decisions regarding relocation should tend toward minimizing costs and maximizing gains, even when they are made according to cultural, ideological, or other criteria. This is regardless of where a state falls along the territorial-hegemonic spectrum. Second, these decisions are made by the empire within overall strategies employed in conquering, controlling, and exploiting new territories, but according to the conditions encountered in the specific province and its neighbors. Building from those two concepts, the remainder of this chapter presents a theoretical framework within which to analyze how and why resettlement was undertaken. This framework lays out the major variables an empire may have considered in determining whether and how to permanently relocate subject peoples, what the major costs and benefits of those variables may have been, and how they may have fit within overall imperial aims according to local conditions. It also considers how those variables are inter-related.

First presented are the major benefits to be gained from long distance, permanent relocation of groups; as the main benefits, they can also be characterized as the state's objectives for such strategies. Next, the costs associated with resettlement are considered. Finally, the discussion focuses on the other main issues that must be addressed by imperial decision makers, considered in light of the necessity to attain the stated goals while minimizing the associated costs. It is notably difficult to measure and compare the relevant costs and benefits in a quantitative manner,

especially in the context of systems that operated hundreds of years in the past and for which archaeological and documentary evidence seldom provide enough detail. Many quantities, e.g., amounts of materials produced by resettled people, may be reasonably estimated, yet the difficulty remains in how to compare different values, such as units of cloth produced versus units of gold. Consequently, these comparisons must be qualitative in nature, i.e., evaluating which outcomes are more valuable than others.

Because resettlement can take on many different forms, it is necessary here to limit the treatment of the subject to the types most likely to occur given the conditions pertaining to early, pre-industrial empires. For example, as empires expand and absorb more territory, the value they place on the people who inhabit those lands may tend to one of two extremes: either those people are considered a valuable resource whose labor can be utilized by the state, or their value is outweighed by that of the other resources of the land, which the empire already has ample labor to exploit. With either scenario, the state may see fit to force groups of people to relocate, but with different approaches. When it is the case that the conquered people are valued as a resource, they are incorporated into the structures of the state, and in the second case, they are likely to be excluded, pushed aside, or even exterminated. The former mode likely prevailed in early empires, while the latter mode has probably been common only in the last few centuries and is excluded from this discussion.

Benefits of Resettlement

Because a state can often derive multiple benefits from relocating a group of people, it often may be difficult to discern how many were intentional goals, and which may have been the primary objective. I have chosen to characterize those

benefits the empire explicitly aims to realize as the *objectives* of resettlement, and the other benefits, which are derived from avoiding the implementation of more costly alternative strategies to accomplish the same goals, as *savings*. Because those savings are directly tied to strategies not followed and are thus hard to qualify in relation to resettlement, I focus here only on delineating the major objectives of forced relocation.

Pacification and Control. The pacification and establishment of control in newly conquered or rebellious territories and the maintenance of control over those already pacified are primary needs for any expansionist state, and are perhaps the most important and most common objectives of resettlement. These ends can be addressed in several ways. For example, the principal effect of relocating a portion of a social group is to divide the people into smaller groups located in disparate lands, thus diminishing their capability to organize resistance to imperial domination in any one location. In small numbers, loyal colonists brought into restive provinces can serve as spies to report on the activities and attitudes of the locals, providing information useful for quickly responding to insurrections. In larger numbers, settlers can function as a reserve militia to directly suppress native opposition. More conspicuously, the colonists could be contingents of active soldiers or guards permanently stationed in a province to maintain direct control. Colonists of any sort transplanted into troublesome regions may serve the end of pacification by teaching the locals the ways of the empire, helping to integrate the natives into the social, cultural, economical, and religious spheres of the state.

Almost every permanent long-distance resettlement will have an element of pacification and control by virtue of breaking a population into smaller groups.

However, this objective cannot be assumed to be the primary goal of every project, nor to always be a conscious factor in the decision making process.

Economic Production. The second major goal is addressing imperial economic needs by using resettlement to efficiently enable or increase the production of goods or the provision of services. For example, a permanent colony may be desirable when the inhabitants of a province are not numerous enough or do not possess the necessary skills to meet the empire's demand for certain goods or services. In other cases, the state may simply wish to increase production beyond the capabilities of the local population, or to take advantage of resources not previously exploited in the region. Alternatively, the empire may wish to have people with a certain set of skills available in every province.

Just as every resettlement project serves the ends of pacification and control, each one will also have an economic component by virtue of the labor or goods the colonists may be required to provide to the state. In the same manner, it cannot be assumed that an economic objective is always a primary or an intentional goal of relocation. It is just as likely that the economic contribution of those relocated differs little from what would have been required if they had not been moved, and the simple fact that they are making a contribution to the state should not be misconstrued as being the primary objective of resettlement.

Military and Security Objectives. Resettlement can also be used to serve military and security objectives beyond those of pacification and control of the inhabitants of a province. These goals can include the establishment of forts or other posts to counter threats coming from outside the province, or to control travel through it by patrolling bridges, roads, passes, etc. The focus may be external to the empire,

i.e., border defense, or internal, such as countering threats in nearby provinces within the empire.

Religious and Ideological Objectives. Religious or ideological objectives can also be addressed with resettlement, e.g., establishing colonies to serve important ceremonial sites under imperial control. The settlers could perform a range of functions, from serving as priests and other functionaries, to more economically oriented tasks of building maintenance or production of food or craft items to support the functioning of the settlement. By moving people throughout the empire to serve ceremonial sites, the power of the state religion is reinforced, and so becomes a more effective tool for the control of subject peoples, reducing costs of more direct forms of control. In another vein, state ideology may influence the details of how some resettlements are undertaken, e.g., by dictating which groups of people may settle in certain lands, or in the gathering of peoples from the reaches of the empire reside in the heartland can symbolize the unity of the realm and reinforce the center of power, or from another point of view, they are conveniently located potential hostages from throughout the realm.

Other Objectives. There may be other goals that can pursued through resettlement, but they are likely to be closely related to the objectives outlined above, or not involve the movement of very large numbers of people. For example, people may be transplanted over long distances to serve in positions within the government, including record-keepers, census-takers, servants, etc. Their primary purpose is to serve in essential roles within the imperial administrative structure, but by the nature of those assignments, they are more likely to be relocated as individuals rather than in cohesive social groups of significant numbers.

Costs of Resettlement

In contrast to the benefits, which are long-term, many of the costs of permanent relocation over long distances are limited in time to the duration of the actual period of movement and for perhaps a few years afterward. The costs can be divided into the losses incurred by those resettled and the investments needed on part of the empire to implement resettlement.

Costs to Settlers. The major cost to the colonists is the loss of economic production during the period of movement. Transportation costs are also incurred, depending on the amount of manual labor and the number of pack animals dedicated to the movement of people and their possessions. Additionally, there is the potential for humans and animals to suffer from injury, illness, or death during the move, and goods may be lost from accidents or breakage. Once the settlers have arrived at their destination, effort may have to be expended on constructing new homes, preparing new fields, replacing goods that were left behind, etc. Finally, there may be a time lag of a year or more before a relocated group's economic output can equal previous levels, because significant changes in environment can require time to adapt to new conditions, especially for agriculture and exploitation of natural resources.

There are various approaches that could be taken to mitigate these costs. For example, relocation can be scheduled during months of inactivity in the agricultural cycle, or some other periods of low production related to the main economic focus of the colonists. Other expenditures could be avoided by allowing the colonists to use existing agricultural fields and live in existing unoccupied homes in their destination province, such as those abandoned by people transferred to other regions.

Costs to the State. The empire's costs take several forms. Perhaps the most difficult and expensive is inducing people to move, as few people would willingly

leave their material possessions and their native social, political, and cultural environment. The options for ensuring cooperation are numerous, ranging from forceful to generous means; conceptually they can be divided into three basic approaches: *coercion, compensation,* and *reward*.

Coercion involves an explicit threat of violence or other severe punishment, sometimes leading to the actual use of force. It is most likely to be employed in newly subjugated regions, where threats of force are enhanced by the memory of recent conquest, and may suffice to avoid actually implementing harsh sanctions. In contrast, coercion may not be necessary in provinces that have been part of the empire for longer periods, or that were incorporated with little resistance. When this path is taken, the empire either must either deploy forces or have them readily available to back up or carry out the threatened actions, while also preventing property damage by those emigrating or those staying behind. Meting out punishment is probably rare because a few dramatic examples serve to motivate other subjects to cooperate more readily, thus reducing the costs of coercion in the future.

With compensation, the state encourages cooperation by making up for losses incurred by colonists. This can include providing for the settlers' care during the journey and until they manage to start producing for themselves after reaching their destination. The state could supply shelter, clothing, tools, and other material goods in the destination province to replace what was left behind. These costs may be covered directly from government coffers, or indirectly by requiring the local inhabitants in the new province to supply the settlers. Compensation may be more commonly applied to groups who are not particularly hostile to the empire. By alleviating the burdens of being relocated, compensation can lessen the resentment of those being moved, thus advancing the goal of pacification.

Rewards encompass those benefits given to the colonists above the level of compensation. These can range from bestowing status or luxury items, especially of imperial styles, to granting access to extra land or resources. Alternatively, the colonists could be assigned positions of higher status in their new homeland, or have their tribute obligations lessened or changed to more prestigious tasks. Rewards may be expensive to hand out, but they have more potential to promote loyalty in the colonists than coercion and compensation. In many cases, the relocation assignment itself could be construed as a position of status, and thus by its nature be presented as a reward to those transplanted, letting the state avoid any material costs. The empire may restrict rewards to elites, limiting costs while gaining important cooperation in moving the whole group. In whatever form it takes, reward should be in addition to compensation, else it loses value when the settlers must otherwise absorb significant losses.

An empire is likely to use a mix of these three forms of inducement, adapted to the specifics of each case. The most important factor may be the attitude of the people being moved, with explicit coercion reserved for hostile groups, and reward for the most cooperative and loyal groups. The difficulty or desirability of an assignment can also affect the strategy employed to ensure cooperation, with more compensation or rewards given for the harder tasks. The primary objectives of resettlement should also be a major influence. When pacification and control are the goals, coercion is more likely to be employed. Because it can result in hostility and resentment, that approach is less likely when the settlers are given positions of responsibility, such as military or religious assignments; in those cases, compensation and reward should be favored. However, coercion is always an element, insofar as

the threat of force is implicit in the power of the state, while compensation and reward are approaches that must be explicitly employed.

In addition, the state must make the direct investment of dedicating representatives to oversee the whole process, and make a range of decisions on the specifics of the project, e.g., who to move, when and where they will settle, and what they are allowed to bring with them. The state can sustain further costs after a colony is established by continuing to provide economic support. The alternative of requiring self-sufficiency is obviously less costly from the imperial viewpoint. The latter strategy may be the most common, especially relocations ordered for pacification, and in cases where colonists have sufficient access to agricultural land or are allowed to produce surplus goods for exchange to support themselves. Providing long-term support is likely in cases where the majority of the settlers' labor is dedicated to the service of the state, as with full-time soldiers and state functionaries, or when other circumstances negate the feasibility of self-support, as when settlers lack access to arable land or other critical resources. In exceptional cases, colonists may be provided for as a reward or as a privilege of high status.

Finally, the state may decide to defend relocated groups from perceived threats, thus incurring costs through such measures as establishing a garrison or building fortifications. Direct protection is likely to be reserved for settlers placed near hostile groups, especially those performing valuable economic roles. The empire can avoid those costs by obligating the colonists to protect themselves by building their own defense works, maintaining readiness for warfare, etc. However, that strategy can be two-edged because it augments the colonists' ability to rebel against the state; thus only those considered loyal to the empire should be so obliged.

Other Variables

In this section, I detail the other major variables that may factor into how an empire carries out relocation. These variables, while they can be conceived as separate from the above benefits and costs, have advantages and disadvantages of their own, and can be closely tied to the objectives of a given resettlement project.

Additional Economic Considerations. Apart from the above issues of costs and benefits, other aspects of the empire's economic arrangements in the provinces can be directly affected by resettlement. For one, tribute obligations may be altered, compared to what would have been required of a group if it were left in place. The tribute amounts may be reduced or increased as a form of reward or punishment, depending on the behavior of the group, or the types of labor or goods assessed may be altered, especially when confronted by a change in environment and resources. In addition, resettlement and occupation may be linked. In most cases, settlers probably continue in their existing lines of work. Many, especially highly skilled craftworkers, may be chosen for resettlement specifically to perform the same job elsewhere. People with less specialized skills may be more likely to be assigned to other lowskill jobs. In many cases, tribute obligations and assigned occupations are directly tied to the primary objectives of resettlement, as with people moved to serve military goals, those working as government servants, and in all economically-oriented colonies.

Political Organization and Administration of Colonists. With each province it acquires, an empire must deal with the political integration of the inhabitants into the whole; with forced resettlement, it is faced with the additional tasks of reconfiguring the disrupted political systems of both the colonists' homeland and their assigned province. As Schreiber (1992:17-27) outlines, there is an array of basic ways an

empire can consolidate its control over a province, achieved through adjusting the number of levels in the local political hierarchy and how those levels are filled by imperial or native leaders. It is possible that the state would follow the same strategy regardless of the presence of resettled subjects, in which case it could simply plug the colonists directly into the political system by treating them as a unit equivalent to any similar sized local group.

However, there are concerns that would encourage other approaches. Again, the attitude of the members of the group being moved can be influential; it is likely that more elites of friendly groups would be allowed to hold important positions in the political organization of their new province, while those of hostile groups would be granted fewer and less important posts. With resettlements where native leaders are allowed to retain their positions within the hierarchy, it is more efficient to transplant people as intact political units, e.g., a village and its chief. This maintains the leader's authority and avoids the necessity of building new community bonds and power relations.

In certain scenarios, it is possible that native elites could end up holding positions of power over settlers, or vice versa. This is especially likely where the empire implements a more indirect strategy of control, or when the colonists outnumber the remaining aboriginal population. But because such an arrangement provides one group the opportunity to abuse or take advantage of the other, only the more loyal groups may be allowed the position of advantage.

For some projects, the objectives of relocation may directly affect the choice of political arrangement. For example, colonists with military assignments are unlikely to be under the direction of native elites. In cases where cooperation between members of different groups is necessary, e.g., in many economically

oriented resettlements, it may be desirable to integrate the colonists directly under local leaders.

There is also the question of the extent to which the colonists will maintain political connections with their home provinces. The simplest option is to cut all ties between the groups, limiting interactions between the settlers and those remaining behind, thus furthering the ends of pacification and control by inhibiting the ability to organize resistance. At the other extreme, the empire could allow the colonists to continue effectively within the political organization of their native land, remaining totally outside the hierarchy of their new province. Assuming an indirect method of control by the state and cooperative native elites, this latter scheme has the advantage of allowing paramount leaders to maintain a level of control over all their own subjects. But it has the disadvantage of being inefficient to implement over long distances. As something of a compromise between the extremes, an empire may allow some relocated groups to maintain limited symbolic participation in the political organization of their native land, as a way of rewarding loyalty. This arrangement can placate the native elites in the home province by allowing them nominal control over all of their former subjects, while letting the colonists consider themselves still connected to their homeland. It also has the advantage of maintaining divisions between settlers and native groups.

Within the home province, if the empire chooses to replace the relocated subjects with colonists from elsewhere, then the above considerations also apply. However, if settlers are not brought in, the empire faces a different set of alternatives. If the decrease in population is significant enough, the state may choose to reduce the number of levels in the political hierarchy and perhaps lower the political status of the
province to that of a smaller organizational unit. Moreover, the state could subsume the region under another political hierarchy by attaching it to a neighboring province.

Social Considerations. Empires, in the interest of controlling a domain comprising multiple social and cultural groups, are often concerned with regulating social processes. Forced long-distance relocation mixes together many more social or ethnic groups than would otherwise occur, often involving populations unfamiliar with each other. Consequently, resettlement introduces new types of concerns and heightens the importance of actively regulating social processes, namely the level of interaction between individuals of different groups, and the maintenance of group identities.

Approaches to governing interactions between social groups (i.e., settlers and natives) can span the spectrum from complete integration to total segregation. Both could actually work to the state's advantage: integration can help colonists build more ties with their new home and encourage a sense of belonging, while separation keeps people in smaller groups and inhibits them from forming alliances to resist imperial rule. In many cases, interactions between different groups are necessary, especially in economic matters, as when people rely on markets and other exchange mechanisms to acquire needed goods. Separation has the benefit of quick implementation at the beginning of a resettlement project, but can require an investment to enforce and can be difficult to enact later on. It would be most viable when the primary goal of relocation is rapid pacification. Integration could likewise meet with resistance from either natives or colonists, and take longer to implement. Individuals in the different communities must establish relationships from a starting point of non-familiarity, and they must deal with differences in language and culture. Mandated integration would

be most beneficial in resettlements requiring cooperation between groups, especially with economically oriented projects.

With the issue of group identities, the empire again has options spanning a spectrum, this one ranging from compelling people to maintain their existing social identities to forcing assimilation into another group. Again, both approaches can be beneficial in the matter of establishing and maintaining control. By mandating the perpetuation of existing social groups, and concomitant markers such as clothing, hairstyles, and language, the state can more easily monitor the movements and interactions of its subjects. This also inhibits the formation of alliances, especially where there is existing enmity between different groups. Mandating the maintenance of identities can require an investment in enforcement, but can be quickly implemented. On the other end, by breaking down old groupings in the process of assimilation, people can identify more with the society and culture of the empire; ideally this reduces the likelihood of rebellion, because people may begin to see themselves as participants in the state, rather than conquered subjects. Assimilation has the disadvantage of being a long-term process, which can require the commitment of people to instruct people in the ways of the empire. It can also can meet with determined resistance, as many people may oppose the idea of giving up their identity, preferring to cling to whatever is left to them, even if reduced to the mere fact of their separate origins. In practice, some groups may never be totally submerged.

The issue of state interference in ethnic or cultural identities is certainly a many-faceted one, and the policies implemented are likely to include elements of both assimilation and maintenance of identities, as well as allowing groups some control over aspects of their identity. For example, an empire needs to impose certain aspects of its culture on its subjects to make them governable. This can include language,

political structures, accounting methods, agricultural techniques. Thus, partial assimilation may be sought in the effort to control and extract labor and goods from subject groups, even if the explicit policy is to enforce ethnic divisions.

While the options for controlling group interactions and identities are very similar, the two are not inter-changeable. It is conceivable that relocated groups could be allowed to closely interact with one another, with each maintaining separate identities. In like manner, although less practical, neighboring groups could be very limited in contact, yet lose their separate identities through assimilation into the dominant imperial society.

The empire has a third option with either of these issues, that of allowing the subject peoples to determine their own identities and decide to what extent they will interact with each other. This laissez-faire strategy has the advantage of requiring no investment on the part of the state, which benefits as long as the groups stay pacified. When taking this approach, the empire is more likely to be utilizing very indirect, hegemonic methods of control, in which case they would be unlikely to be resettling significant numbers of people. Alternatively, they may see little advantage in managing social relations; this would be unusual given the dynamics of expansionist states, which are geared toward establishing and retaining control through multiple paths.

Logistics. Many of the remaining major aspects of imperial strategies of resettlement can be grouped under the theme of logistics, i.e., the concerns of exactly who to move, where and how to move them, and how to settle them within their assigned province.

Who to move is a very open question, because any conquered group could be subjected to relocation. But whether or not a particular group is forced to move

depends directly on how resettlement can meet the specific needs of the empire, influenced by the behavior of the group and the range of skills they possess. As previously noted, groups who strongly resist conquest or rebel against imperial rule are most likely to be resettled for the ends of pacification and control. Those with special skills, e.g., refined craft making or military prowess, are likely to be chosen for specialized economic or military assignments. Any group could be called upon for general economic projects, or for religious/ideological objectives.

Where people are moved to depends essentially on the primary objectives of resettlement. Economic, military, or religious/ideological projects require colonists to be sent to specific locales where particular services are needed by the empire. On the other hand, groups being pacified conceivably can be sent to any province that could accommodate them. But the practical choices are tempered by considerations of distance and environment.

Because the expenditure of time and energy in the process of relocation increases directly with distance, there is an incentive to move people no farther than necessary. Because this treatment of resettlement is limited to movement of groups outside of their native social and cultural spheres, by definition the minimum distance a population can be moved is into an adjacent region inhabited by a different sociocultural group. The maximum distance of a move is limited only by the physical extents of the imperial domain. But with larger empires, few goals could justify such displacement, perhaps with the exception of groups being given extreme punishment, or those with exceptional skills. Shorter moves are expected for projects with economic, military, or religious objectives. There is little reason not to seek the nearest available groups with the proper skills or other qualifications to be given these assignments. In contrast, minimizing distance is not fully desirable when the primary

goal is pacification. The state benefits by moving hostile groups far enough from their home province to inhibit communication with those remaining behind and reduce the chance that colonists could return home to participate in an insurgency. Therefore, with an explicit objective of pacification there should be, at the minimum, one intervening province or region to serve as a buffer zone. Otherwise, relocation to an adjacent region may be restricted to more cooperative groups, and could even be construed as a reward.

Empires may avoid moving people into environments that differ substantially from that of their native lands in order to limit the detrimental health and economic effects that could result from drastic changes. In fact, the state may actively aim for sending groups to provinces where the ecology, climate, etc., approach those of their homelands, thus avoiding associated costs of supporting people while they adapt to new surroundings and consequent losses of contributed goods or services. This approach may be most crucial for resettlements with economic objectives, especially those focused on agriculture. However, circumstances where critical resources must be obtained from inhospitable climes can preclude any mitigating strategy, as can military assignments in remote, but strategic locations. Furthermore, groups being pacified may be subjected to an acute change in environment as a form of punishment.

In deciding *how many* people to remove from a region, the state has the choice of withdrawing anywhere between 0-100% of the population, possibly dispersing them among a number of different provinces. It is likely that people are rarely removed in numbers greater than 75-80% because of the sheer costs involved in moving so many. However, such extensive removal may occur in the effort to pacify particularly hostile people. Those groups can be broken into smaller, isolated units,

and punished by the resulting decimation of their native social and political structures. While not likely to occur often, a few of these extreme cases can serve as a warning to other groups in the empire. The actual proportion of people forced to move out depends to a great extent on the objectives of each project, with 50% serving as something of a benchmark. Assuming an equivalent number of settlers is brought in to replace those removed, as may be likely with pacification projects, the 50% level marks the point where the natives cease being in the majority in their home territory. Depending on their awareness of the numbers of people removed and brought in, upon passing the half-way mark the natives may perceive that they are losing their "ownership" of the land to other ethnic groups, compounding the loss of political autonomy suffered upon incorporation into the empire. Thus, it is conceivable for the state to construe withdrawing the majority of the inhabitants of a region as a punishment reserved for pacifying hostile provinces.

But the state must balance contradictory desires when relocating its more loyal subjects, because on one hand they are ideal candidates for many objectives of resettlement, while on the other hand, the empire may not wish to risk creating ill will by depleting the numbers remaining in their home lands. Consequently, loyal groups may be resettled frequently, but still retain the majority in their home provinces. In addition, removing fewer than half of the inhabitants of cooperative provinces allows the locals, by virtue of their numerical superiority, to better contain populations brought in from hostile areas. Thus, it may be common that in most resettlement projects without the explicit objective of pacification, e.g., those primarily of an economic, military, or religious nature, less than 50% of the population would be removed.

In the related matter of determining how many people to bring *into* a region,

there is no concrete upper limit. The numbers are constrained instead by how many people the state determines the area can accommodate without state support, combined with how many it is willing to provide for beyond that point. While these numbers may difficult to determine, they are likely to be at least near, if not above, the pre-conquest population level. In many cases, as an empire expands, the decimations of war and the acquisition of uninhabited or sparsely populated lands can result in an over all decline in population densities, thus the people brought into a province may seldom number as many as were removed.

From a basic economic viewpoint, permanent, long-distance resettlement is an opportunity to redistribute human labor resources to more efficiently match the layout of the state and the distribution of material resources. Thus, where extra labor is needed, e.g., in economic projects, military outposts, and even ceremonial centers, then people may be settled in a region such that the population surpasses the preimperial level or the level at which they could be self-supporting. Otherwise, when the objectives of relocation are restricted to those of pacification and control, the number of incoming colonists should not exceed the point that accommodates self-support. If in a region no people at all are brought in to replace those moved elsewhere, it is likely the empire considers the native population sufficient to exploit the local resources, and that there is no other requirement for extra labor.

How the colonists are settled within the landscape of their assigned province may be influenced most by three factors. First, the state may favor situating people within existing sites and structures, namely ones that were vacated by natives forced to relocate elsewhere, as it is much more cost-effective than establishing new towns, building new houses, preparing new fields, etc. However, the construction of new homes can be mandatory when the incoming population surpasses the pre-imperial

level, or if the empire forces the abandonment of certain settlements, such as defensible hilltop sites, that may be deemed unsuitable for continued occupation by subjects of questionable loyalty.

Second, the specific goals of relocation can determine in what types of sites the people will be settled, where those sites are located, and whether new settlements must be established. For example, military assignments may require groups to live in remote or isolated locales, where new forts or garrisons must be built. Economic projects may call for the colonists to live close to the resources they are to exploit, where new habitation sites often must be established. Religious assignments may necessitate the expansion of occupation around major ceremonial centers or the construction of new habitation sites near important shrines.

Third, the empire's social policies can direct to what extent colonists live among the locals. If the state favors assimilation or integration, then settlers are likely to be dispersed among the natives within existing habitation sites. If it mandates the maintenance of group identities or restricts interactions between different groups, then populations are likely to be segregated, usually living in separate towns and villages, and even being exclusive residents within large sectors of provinces. Larger settlements may allow multiple groups to co-exist, while interactions are limited through segregation into separate sectors.

Changes Through Time

Finally, because empires normally exist in a constant state of flux, either expanding or contracting, putting down rebellions, fighting with neighbors, changing modes of government, etc., their needs will change, which will in turn affect the process of forced resettlement. Objectives may shift, the perceived advantages may change, and the numbers of projects undertaken may dwindle or rise. Thus, the differences in how provinces are affected by resettlement reflect not only how the state addresses its needs in particular regions, but also by the stage in the empire's life.

With this framework of variables that may factor into a state's decisionmaking when forcing populations to resettle, an archaeological examination of the process is a matter of identifying or assessing as many of those circumstances as possible in a context where relocation is presumed to have occurred. The next chapter sets the stage for investigating forced resettlement in the Andes, with a discussion of resettlement practices in the Inca Empire, organized around the variables put forth above.

CHAPTER 2: INCA IMPERIAL STRATEGIES OF RESETTLEMENT: THE MITMAQKUNA

The realm dominated by the Incas, known in Quichua as Tawantinsuyu, represented the largest empire in the prehispanic New World, at its height reaching over 4,000 km from central Chile to northern Ecuador, and incorporating dozens of different ethnic groups formerly divided into hundreds of politically independent societies. The impressive abilities of the Inca rulers to integrate into their empire these myriad societies over such a large territory and maintain the health of the state resulted in the creation of the most complex political organization developed in the pre-contact New World. Because of the extent of Tawantinsuyu, the range of societies controlled by it, and the availability of colonial documents dealing with Inca government, the Inca state is an ideal subject for the archaeological study of early empires.

The Inca Empire is also remarkable for the degree to which they resettled their subjects. In contrast to the limited number of colonists sent out by the Aztec Empire, the Incas resettled tens or hundreds of thousands of people, and few regions, if any, were left unaffected. Because they were ascendant in late prehistoric times, much is known about resettlements under the Inca through ethnohistorical records; in fact, some present-day native Andean people still recount that their ancestors were relocated during that period. Those resettled within the realm of Tawantinsuyu were known in Quichua as *mitmaqkuna* (*mitmaq* in the singular, and *mitima* in the hispanicized singular form), which basically means "foreigner." But within the context of Inca imperial administration and the resulting social milieu of the Andes, the term has a more specific meaning. Fundamentally, *mitmaqkuna* became a category designating those subjects who had been permanently relocated outside of

the land of their ethnic origin by the empire to serve a range of imperial ends (Rowe 1982). People in this category were distinct from those who may have been temporarily relocated to another province to perform a specific *mita* (labor service), or those who may have been resettled within their existing sociopolitical sphere for other purposes, such as those who were removed from fortified hilltop settlements for concerns of security.

This chapter examines how the Incas used resettlement was as an integral part of the expansion and maintenance of their empire. The first half of the chapter reviews studies of the Inca empire that focus on provincial conquest and consolidation of control, and describes the limited number of archaeological projects that have actually address the topic of resettlement in the field. The second half discusses Inca resettlement practices within the conceptual framework laid out in Chapter 1, drawing mostly from what is understood from about *mitmaqkuna* projects through ethnohistorical studies.

INVESTIGATIONS OF INCA PROVINCIAL EXPANSION

As with the study of other early empires, early research on the Inca state focused on the most impressive sites in the imperial heartland, such as Cuzco and Machu Picchu (e.g., Bingham 1913, 1930; Valcárcel 1934-1935, 1946), with the occasional description of other major sites elsewhere within the realm of the empire (e.g., Uhle 1923). In the early 1940s, Rowe (1944) began applying a more regional approach to studying the remains of Inca settlements around Cuzco. It was not until Menzel's (1959) seminal study of the Inca occupation of the south coast of Peru that the systematic analysis of the Inca conquest of the provinces and the consolidation of their control over those territories was initiated. Through the combined use of

archaeological and ethnohistorical data, Menzel showed that the Incas applied different strategies of administrative control within neighboring valleys that encompassed similar environments. Menzel concluded that the Incas varied their strategy in each valley depending on the level of resistance to foreign domination and the pre-existing level of sociopolitical complexity.

Since Menzel's work, more research has addressed the Inca conquest and consolidation of provinces comprising a range of sociopolitical, cultural and ecological settings. Following her example, a number of analyses have successfully integrated archaeological and ethnohistorical data. For example, Dillehay (1977) utilized both sources of information to compare the Inca strategy of control within three different environmental zones of the Chillon Valley on the central coast of Peru. Likewise, Schreiber (1987, 1993) used archaeological and ethnohistorical data to analyze the Inca conquest and consolidation of the province of Andamarca Lucanas, in the south-central highlands of Peru, and has applied the understanding of Inca provincial control to the analysis of the earlier imperial expansion of the Wari state in Peru (Schreiber 1987, 1992). As part of the Upper Mantaro Archaeological Research Project, D'Altroy (1981, 1987, 1992) has employed such an approach to create a thorough analysis of the Inca occupation of the upper Mantaro Valley region in the central highlands of Peru. Elsewhere in the Peruvian highlands, Morris and Thompson have analyzed the major Inca administrative center of Huánuco Pampa (a.k.a. Huánuco Viejo) and the surrounding province of Huánuco through extensive archaeological work combined with knowledge gained from the detailed ethnohistorical records available for the area. In the Lake Titicaca region, Julien (1978, 1983, 1993) has applied these methods to examine the Inca occupation of the region of Hatunqolla, while Stanish (1997) analyzed the whole Titicaca region in

general and the Juli-Pomata region of the south shore in particular. Idrovo utilized documentary evidence (1988) alone and combined with archaeological data (2000) to probe the Inca occupation of Cañari territory and the nature of the Inca city of Tomebamba in the southern highlands of Ecuador. Along the Peruvian coast, Morris (1988) dealt with both sources of data to examine the Inca occupation of the Chincha Valley on the south coast, focusing specifically on their maritime trade and the role it played in the Inca strategy of control in that valley, while Netherly (1988) investigated the consolidation of Inca control over the realm of the former Chimú Empire on the north coast. For northern and central Chile, Stehberg (1995) analyzed the Inca occupation over a broad area.

This mode of investigation has led to a recent edited volume (Malpass, editor 1993) centered explicitly on the benefits of examining the Inca occupation of the provinces through combining archaeological and ethnohistorical information, and presented the results of such studies from various sectors of Tawantinsuyu. This includes analyses of the Inca presence in Huamachuco in the northern sierra of Peru (Topic and Topic 1993); the Chupachu territory in the province of Huánuco in the central highlands of Peru (Grosboll 1993); Andamarca Lucanas in the south-central highlands of Peru (Schreiber 1993, as mentioned above); the Atacama region of northern Chile (Lynch 1993), and the Lake Titicaca region (Julien 1993). Over all, the volume illustrates and emphasizes the complementarity and utility of using both sources of data to study the workings of the Inca Empire, while also stressing that much more such research is necessary to fully address the issues of imperial expansion and maintenance (Julien 1993; Malpass 1993a,b).

In the more traditional vein of Inca studies, many analyses are still being conducted with almost exclusive reliance on ethnohistory. For example, Pease (1982)

used documentary evidence to compare the level of integration into Tawantinsuyu of the three distinct societies of the Lupaca of the Lake Titicaca region, the Chimú state on the north coast of Peru, and the Chachapoyas on the border of the highlands and rain forest of northern Peru, contrasting the pre-existing political organizations, the Inca strategy of control, and the effects of population relocations. Salomon's (1986a, 1986b, 1987, 1988) analyses of ethnohistorical documents centering on the societies in the northern highlands of Ecuador illuminated the effects of the Inca incursion on the economic and political organization of the different provinces in that sector of the empire. Lorandi (1988) has used ethnohistorical accounts to examine the Inca conquest and occupation of northwest Argentina, while LeVine (1987) has analyzed visitas from the Peruvian highland province of Huánuco to examine the Inca political and economic strategies of that region. Wachtel (1982) utilized the documentary evidence for a detailed examination of the massive colonization project carried out in the Cochabamba Valley of Bolivia, while La Lone and La Lone (1987) examined the Inca strategies of establishing administrative and productive enclaves in that valley as well as the Abancay and Vilcanota valleys of Peru.

The reliance on ethnohistorical information is understandable in many cases where conducting archaeology is difficult or not feasible, and written records certainly provide us with details on questions that cannot be addressed archaeologically. Conversely, there are many areas of the former Inca realm where the lack of relevant ethnohistorical information necessitates a reliance on archaeological data to understand the strategies pursued by the Incas. Such is the case for the Tarapacá and Antofagasta regions of northern Chile, where the Inca presence was investigated by Niemeyer and Schiappacasse (1988). Other projects with an archaeological focus, such as Conrad's (1977) analysis of the Inca site Chiquitoy Viejo on the north coast of Peru, and Bray's (1992) examination of the Inca occupation of the Caranqui region in the northern highlands of Ecuador, though not directly incorporating ethnohistorical information, have been informed by the understanding of Inca administration as derived from the study of such data.

A few other studies of Inca provinces have been more preliminary in nature, in that they catalog the Inca sites in a region, rather than analyzing the Inca strategy of occupation. Such studies include those of Castro Rojas (1992) in the province of El Loa in Chile, and Bárcena (1992) in the province of Mendoza in northwest Argentina. Ideally, such studies can be fleshed out with more intensive archaeological work and combined with ethnohistorical analyses to provide a fuller understanding of Inca activities in those areas.

Finally, a subset of analyses of the provincial workings of the Inca Empire deal explicitly with one facet of imperial provincial strategies: the large network of roads that connected all of the reaches of Tawantinsuyu and facilitated communication, transportation of goods, and the movement of armies. The road system and the related infrastructure of bridges, way-stations, storage rooms, etc., were crucial elements in the management of the Inca Empire, and is often easily visible in the archaeological record. A number of early efforts (e.g., Raymondi 1874-1879; Regal 1936; von Hagen 1955, 1976) were focused mainly on tracing the paths of the main roads in the system and locating Inca sites along them, rather than dealing with the role that these roads and installations played in controlling the empire beyond the essential transportation and communication functions. Furthermore, they were not focused on the range of variations between the provinces, but more on the general nature of the roads. All of these concerns are addressed by Hyslop (1984), who has produced the most significant and thorough work on the subject to date. More

recently, regionally-focused studies (e.g., Stehberg and Carvajal 1988; Fresco 1983), often connected with Hyslop's projects, have concentrated on fieldwork to locate surviving traces of Inca roads and installations along them. These investigations aim to delineate with the most possible detail the paths of the Inca roads in a given region, often integrating ethnohistorical information with the archaeological findings.

Most of the studies cited above are presented as elucidating the nature of Inca strategies of conquest and consolidation as specific to the circumstances found in those parts of the empire. A number of those works also treat in depth certain aspects of Inca practices, such as road building, administrative strategies, population resettlements, tribute, etc., as illustrated by their particular projects. Other authors have dealt with these issues in a general fashion, as understood from the Spanish chronicles and often illustrated by archaeological information. Such works include Rowe's (1982) discussion of the way different statuses relating to service to the empire helped to unify the empire and Julien's (1982) study of the Inca system of decimal administration. The economic organization of the empire has been a popular subject, having been treated by Murra (1980 [1955]), who also has examined the more specific aspects of provincial labor obligations (Murra 1982). D'Altroy and Earle (1985; Earle and D'Altroy 1988) have also analyzed Inca economic approaches, including forms of Inca financing and storage, while a whole edited volume (LeVine, editor 1992) has been dedicated to Inca storage systems.

The works cited above make it apparent that the understanding of the specific issues of Inca expansion and control has been increasing in the past two decades. But it was not until the publication of *Provincial Inca* (Malpass, editor 1993) that there had been an attempt at "a broad analysis of such projects over an area wider than a single region, with the intent of evaluating the impact of the Inca Empire as a whole"

(Malpass 1993a:5). Given this still-developing state of the examination of these topics, it is not surprising that most of these studies do not take an explicit theoretical approach. Instead, they tend to be couched within the context of Inca imperial practices as understood from an Andean perspective, bypassing a broader viewpoint that could allow comparison to other ancient empires outside South America.

In contrast, a few researchers are embracing general theories of imperial expansion and maintenance and applying them to early Andean empires. Most notably, D'Altroy (1992), utilized the territorial-hegemonic model to analyze the Inca occupation of the Jauja region of Peru, and Schreiber took a similar approach in examining Wari and Inca imperialism in the area of Andamarca-Lucanas. Although most other treatments of Inca provincial conquest and consolidation do not utilize an explicit theoretical model, many of them, as early as Menzel's study (1959), do apply many of the same underlying assumptions as the territorial-hegemonic model in the evaluation of Inca strategies in the provinces. This is no doubt a result of the materialist and energetic underpinnings of much of American archaeological practice in the last half of this century, which also form the basis of the territorial-hegemonic model.

ARCHAEOLOGICAL INVESTIGATIONS OF MITMAQKUNA

Most of our knowledge of Inca relocation strategies is derived from colonialera documents. With their more general descriptions of *mitmaqkuna* practices, the works of chroniclers such as Cobo (1979 [1653]), Cieza de León (1984 [1553], 1985 [1553]), Garcilaso de la Vega (1966 [1609]), and Sarmiento de Gamboa (1942 [1572]) inform much of our understanding of the basic nature of Inca resettlements. Regionally-specific documents such as v*isitas* provide more detailed evidence

pertaining to particular *mitmaq* colonies. Such documents have been utilized to produce analyses of individual resettlement projects, such as Wachtel's (1982) examination of the *mitmaqkuna* of the Cochabamba Valley in Bolivia, La Lone and La Lone's (1987) study of Inca enclaves in the southern Andes, and of course, the numerous works of Espinoza (e.g., 1970a, b, 1973, 1974, 1975, 1983, 1988a), who has examined the record of *mitmaqkuna* in many parts of Tawantinsuyu.

At times, ethnohistory can tell us much about *mitmaqkuna* in the provinces, such as the ethnicity of the people moved, how many were moved in, and for what purpose. We can also learn what their obligations to the state were, who the leaders were, how they articulated with the political administration of their new province, and how or if they maintained contacts with their home provinces. We can sometimes determine where the people were settled within a region, and how many natives were removed. However, ethnohistorical records are notoriously patchy and inconsistent in the amount of information provided, and as a result there are only a few areas where a detailed picture can be drawn of individual *mitmaqkuna* projects. Such information is also tempered by the turbulent events that transpired between the reign of the Incas and when information was systematically gathered under the Spaniards. The direct depopulating effects of the war for succession between Atahuallpa and Huascar, the Spanish conquest, and European-introduced diseases, all further altered the composition of *mitmaqkuna* settlements, and entire villages were probably decimated. The resulting demographic situation encountered by the *visitadores* would thus be a distorted view of the effects of Inca resettlement strategies.

In the end, there are aspects of resettlements under the Incas that can only be addressed archaeologically. For example, archaeology can reveal the effect of these resettlements on the landscape, how resources were utilized, the level of interaction

between newcomers and locals, the amount of acculturation, changes in settlement patterns and material goods, and the effect of imperial culture on the material culture of both groups. Unfortunately, despite the far-reaching nature of changes wrought by the Incas in forcefully relocating many thousands of people, archaeologically known *mitmaqkuna* settlements are rare compared to the cases examined through ethnohistory. The following cases are representative of the sparse number of archaeological field projects that have encountered possible evidence of resettlement, presented roughly in order of the strongest to weakest cases for the presence of *mitmaqkuna*.

Huánuco, Peru

Not surprisingly, the availability of detailed colonial documents concerning the province of Huánuco in highland Peru (e.g., Ortiz de Zúñiga 1967, 1972) combined with the amount of archaeological work done in the region has led to the revelation of some archaeological evidence of *mitmaqkuna*. Unfortunately, that evidence has not been published in much detail, and in general, is not very conclusive.

Perhaps the first instance where ethnohistorical evidence for *mitmaqkuna* was combined with archaeological data comes from Thompson (1967). In his discussion of the site of Warpo, he noted that the ethnohistory indicated the site was inhabited by *mitmaqkuna* after the Inca conquest. But the only indication of a foreign presence was one structure that appeared different from the local Chupachu architecture, and that structure may have been of post-Inca construction. Thompson did find some Inca-like ceramics in test pits near the building, but most of the other pottery found at the site was of the local variety.

In further work, Morris and Thompson (1985) examined other locations where

mitmaqkuna were said to have been settled in the province. In the area where the *mitmaq* villages of Llanquipampa and Malconga were said to have been located, nothing promising was located beyond some destroyed walls and eroded plain pottery. Likewise, the site of Warapa revealed no positive surface finds. Even though Warapa was the home of the main leader of the *mitmaqkuna* at the time of the Spanish *visita*, there were no remains of public architecture at the site, and archaeological materials show "less evidence of relationships with Huánuco Pampa and the Inca" (Morris and Thompson 1985:161). In contrast, the *mitmaq* village of Pachacoto contained both Inca ceramics in the Huánuco Pampa provincial style and locally made ceramics with definite Cuzco influence. Also found at Pachacoto were the remains of a long rectangular building of the type referred to as *kallanka*, indicating an Inca affiliation. Morris and Thompson speculate that the original roles of the two sites of Pachacoto and Warapa were reversed after the arrival of the Spaniards, thus corresponding to the picture of the prominence of Warapa in the ethnohistorical records.

Elsewhere in the Huánuco region, it has been reported that there is "a great deal of diversity among the *mitmaq* sites," but there is "a tendency for there to be a higher proportion of Inca-inspired pottery than in the non-*mitmaq* villages, perhaps a reflection of their Cuzco origins or their closer ties with the state" (Morris and Thompson 1985:161, emphasis in original).

Most recently, Grosboll (1993:69) asserts that the influence of *mitmaqkuna* in the northeastern section of the province has been confirmed archaeologically, citing the work of Thompson (1967,¹ 1972) along with unpublished materials and personal

¹ This brief report by Thompson on two sites in the region does not actually mention any evidence of *mitmaqkuna*.

communications from other researchers. The general locations of *mitmaqkuna* settlements are indicated in ethnohistorical documents, as according to the visita of Ortiz de Zúñiga (1967, 1972), the colonists were concentrated in two locations: the northeastern section of the province, and a smaller parcel in the eastern section. Grosboll notes: "Though the zones of mitima settlement have been confirmed, the separation of mitima and local villages has proved difficult. The various foreign ethnic groups that comprised the settlers of this sector have yet to be spatially delimited" (Grosboll 1993:69). Unfortunately, she does not illuminate how the areas of *mitmaqkuna* settlement were detected. Nonetheless, the purpose of these resettlements is understood through the colonial records, wherein many of the settlers claimed to be put there by the Incas to man forts and guard bridges. Murra (1967:400) suggests that the pre-Inca Chupachu inhabitants of the northern sector had shifted their economic focus to the eastern lowlands, and the Inca resettlement activities were aimed at safeguarding the area. Grosboll (1993:73) points out that the majority of *mitmaqkuna* were placed in the sector where local control was strongest before the arrival of the Incas, but that economic interests may have been equally important, as that part of the province had good potential for growing maize, and had access to lowland crops, especially coca. Unfortunately, the archaeological data have not been utilized to evaluate these points.

Over all, the archaeological revelations about *mitmaqkuna* settlements in the province of Huánuco have not been as satisfying as might be hoped, given the detailed ethnohistorical records. But the work there has the potential to evaluate specific objectives of resettlement with archaeological data, and hints at methods of recognizing *mitmaqkuna* archaeologically, namely through ceramic evidence. More specifically, it seems that the settlements said to have been home to *mitmaqkuna*

usually contained more Inca-related pottery than the local settlements, reflecting their closer ties to the state. Furthermore, because Morris and Thompson also conclude that "it appears that each mitmaq community made its own pottery rather than rely on local sources" (Morris and Thompson 1985:162) it seems that the *mitmaqkuna* were deliberately making and utilizing these state-related ceramic types, rather than having them given to them or trading for them. But whether they were forced to manufacture and use imperial-related goods or did so voluntarily is an open question.

Carhuarazo Valley, Peru

In a survey of the Carhuarazo Valley (now known officially as the Sondondo Valley) in the highlands of south-central Peru, Schreiber (1987:277, 1993:91, 111) has identified one settlement that she suggests may represent a *mitmaqkuna* settlement. This village, Guanca Yuculla, contains architecture exclusively of the local style, along with local ceramic styles, but there were also ceramics found there that are of a style decidedly unrelated to the local pottery. There was also one Cuzco-Inca potsherd found on the surface. Schreiber (1987:277, 1993:111) suggests these remains may be the result of a local community whose inhabitants either abandoned the site before the arrival of the Incas or were removed by the Incas, with settlers from another region being brought in to re-inhabit the site. In addition, Guanca Yuculla is situated close to a set of agricultural terraces of a style atypical of the area, which suggests that outsiders may have responsible for their construction.

While no ethnohistoric evidence directly referred to *mitmaqkuna* being transplanted in the valley, Schreiber (1987:277, 1993:111) suggests that the name of this community, which was listed in a *cédula de encomienda* from 1540, raises the possibility that the inhabitants were of the Wanka ethnic group, and thus from outside

the valley. Alternatively, it could just refer to a rock of some sort, as the Quichua word "wanka" or "huanca" means "rock." Other ethnohistoric evidence states that natives of the Carhuarazo Valley area were relocated elsewhere in Tawantinsuyu (e.g., Monzón 1881 [1586]:201-204), which would have resulted in abandoned villages ready to accommodate incoming *mitmaqkuna*. In any event, while the presence of non-local, non-Inca style ceramics and atypical terraces does not necessarily make a conclusive case of resettlement, it is certainly as strong a case as any of the others cited.

Loja, Ecuador

Investigations by the Misión Arqueológica de Loja (Guffroy 1983c, 1987d) have revealed evidence of possible multi-ethnic enclaves in two sites in the Macará Valley in the southern part of the province of Loja, Ecuador. The two sites, Cucumaca and La Mandala, both contained a mixture of ceramics dating to the Inca Period or to the period just prior to Inca occupation, including Inca, Chimú or Chimú/Inca, Cajamarca, Tacalzhapa (Cañari), and possibly even northern Ecuadorean wares. One grave excavated at La Mandala contained a spout and bridge style vessel with a modeled bird form opposite the spout; Guffroy (1987d:318) suspects it and other ceramics from the tomb to be of Chimú/Inca style. The cultural affiliation of two ceramic vessels encountered in the excavation of a grave at Cucumaca could not be identified, though Guffroy (1987d:315) suggests that one of them may be from northern Ecuador.

The interpretation of these remains is that they represent multi-ethnic enclaves of *mitmaqkuna*, with the majority of residents being of Chimú affiliation. The presence of these various ceramics at these sites is certainly suggestive of a foreign

presence, but unfortunately, many of the exotic ceramics described were from private collections and no contextual information was given for them. Furthermore, the graves excavated at Cucumaca and La Mandala shared some characteristics with a grave from another site in the region, Copal, which implies some sort of local burial tradition. One might argue that these were actually graves of *mitmaqkuna*, hence the imported ceramics, but constructed by local people. But, if Chimú people were numerically dominant, it would seem more likely that they would bury their own dead in their own manner.

The alternative explanation, that these ceramics were trade goods, and that these sites served as trading centers, or way stations along a trade route, was not discussed by Guffroy. Both sites are located in low elevations (La Mandala at about 800m, and Cucumaca at around 400m), and were probably located on accessible routes to the north coast of Peru and Chimú territory. Chimú ceramics (e.g., Collier and Murra 1943:Plate 46) did make their way up into Cañari territory in prehistory, and southern Loja could well have served as a conduit for those materials. Without additional supporting evidence, the status of these sites as *mitmaqkuna* settlements remains questionable.

Tambillos, Argentina

In a brief report on the excavation of the *tambo* (Inca way station) of Tambillos in the province of Mendoza in western Argentina, Bárcena (1992) speculates that some of the occupants of the site were *mitmaqkuna* from northern Chile. The supporting data comprise a number of potsherds whose decorations resemble those of the Diaguita Chileno or Coquimbo Polychrome. While it is entirely possible that *mitmaqkuna* were residing at Tambillos, a few fragments of ceramics

resembling a foreign style are not very conclusive, and could easily have been trade or tribute items that made their way to the site, or correlated with a temporary presence of outsiders. Without further corroborating archaeological or ethnohistorical evidence, Tambillos is a rather tentative case of the presence of *mitmaqkuna*.

Cerro Chena, Chile

Excavations at the site of Cerro Chena, to the south of Santiago, Chile (Stehberg 1976, cited in Hyslop 1990:164), have revealed evidence of *mitmaqkuna* similar in nature to that of Tambillos. A cemetery outside this small Inca fort has yielded Diaguita-Inca style pottery from the Norte Chico region of Chile, which lies quite a ways to the north of Cerro Chena. As with Tambillos, the ceramics could have been imported from the north of Chile for the use of the garrison at the fort, and thus may not directly indicate the presence of colonists, but because *mitmaqkuna* are known to have manned forts, it remains a strong possibility that they were stationed at Cerro Chena. Otherwise, the site is typical of Inca forts, being constructed on a hilltop encircled by concentric walls, with buildings and a patio on the summit, but has no obvious ceremonial structures. Whether they were *mitmaqkuna* or temporarily assigned soldiers, the objective of the residents of Cerro Chena was clearly the protection of the southern border of the empire.

INCA RESETTLEMENT PRACTICES

While little work has been done to examine Inca resettlement practices archaeologically, most of our understanding of them has been derived from ethnohistorical analyses. This section organizes what we know of the range of *mitmaqkuna* projects within the framework of objectives, costs, and other variables

that were put forth in Chapter 1.

Like many Inca policies, practices, and beliefs, the compulsory relocation of people had its antecedents in earlier Andean societies. As early as the Early Intermediate Period in Peru, the Moche state on the North Coast may have removed a substantial portion of the inhabitants of the Santa Valley after its incorporation into the Moche domain (Wilson 1988:336), though such resettlement is only suggested by a substantial decline in population rather than by more direct evidence of where those people may have been moved. Other powerful states, such as the Wari Empire, may have endeavored to re-arrange populations, but there is currently no published evidence that clearly indicates that they established colonies of the same nature as those of the Incas. However, recent survey in the upper reaches of the Nasca Valley of southern Peru has revealed habitations near a Wari administrative site that may represent a relocated population (Katharina Schreiber, personal communication, 1996).

Another possible precursor to Inca *mitmaqkuna* projects is the Andean archipelago settlement system, which is still practiced in many contemporary highland communities. Through this arrangement, communities too distant from the proper environments for producing needed crops gain access to such land by either periodically migrating to the area and returning home, or by establishing a "satellite" community in that zone. If settlements are established, the people become permanent residents there, but make periodic trips to visit and exchange with the home group. The territories traversed in this system can cross not only ecological boundaries, but social boundaries as well, as the satellite villages may be located in the traditional territory of other ethnic groups. In contrast to Inca *mitmaqkuna* practices, this archipelago strategy was not imposed from above by a foreign state, but was a native

response to environmental circumstances, probably controlled at the community level, or at the most, directed by native elites.

The Spaniard Juan Polo de Ondegardo claimed to be the first European to recognize this settlement pattern, having pointed it out in the mid-sixteenth century (Rowe 1982:107). More recently, the practice has been described by Rowe (1946), Murra (1972) and others. The existence of the practice in the early Spanish colonial period, and the legal complications resulting from it (e.g., those described by Pease 1982) suggest that highlanders were establishing satellite communities in prehispanic times. In fact, Rowe (1946:270) described such settlements among the Aymara, which were actually sanctioned by the Inca state. Though the date of origin of archipelago communities is uncertain, archaeological evidence from the Moquegua Valley in southern Peru points to the existence of at least one similar Tiwanaku statesponsored colony in the Middle Horizon, ca. A.D. 600 (Goldstein 1993). This pattern seems to be mainly a southern Andean one; there is evidence of archipelago settlements as far north as the Ecuadorean sierra, but those may have been initiated by the Incas (Salomon 1986a:111-114). In fact, modern circumstances have led the Saraguros of southern Ecuador to develop a variant of the archipelago system, wherein they have started colonizing the lowland rain forest around Yacuambi, in Achuar territory. The Saraguros are utilizing the lowlands for pasture for cattle, which, while it is certainly not an aboriginal Andean subsistence focus, is approached in Andean fashion. Yacuambi lies at least a day's walk away, and there are permanent Saraguro residents there as well as those who make the trek with their cattle seasonally. Thus, whether imposed from above, derived from prehispanic Andean practices, or initiated independently, the archipelago system is a logical solution to economic and environmental circumstances common to the Andes.

Though they differed in several important respects from Inca resettlement practices, the highland archipelago systems could have easily inspired the Inca rulers by alerting them to the potential benefits of re-arranging people, and thus set the stage for the wholesale mixing of populations. Because the archipelago practice probably predated Inca expansion, at least some of the ethnic groups transplanted by the Incas must have had experience in migrating and dealing with living among a foreign population, experience that could have been exploited to some extent by the Inca state to ease the transitions forced upon so many groups. Of course, the threat of military retribution probably played a greater role in convincing these groups to move without resistance and to coexist peacefully with their new neighbors. In any case, the Incas took the idea of resettlement and adapted it to their needs, and carried them out according to characteristically Inca structures of organization.

Inca Objectives of Resettlement

Though probably related to or derived from the archipelago settlement strategy, Inca resettlement projects went far beyond the economic motivation of gaining access to the products of distant environmental zones. Most likely (Cobo 1979 [1653]:190), the original purpose of forcing populations to relocate was to facilitate the pacification of territories newly incorporated into the empire. The Incas accomplished this goal by breaking up the native populations and sending portions of them away to permanently reside in other provinces that had been incorporated into the empire earlier, places where control had been well-established. The *mitmaqkuna* who were brought into the new provinces came from regions conquered earlier, and were already conversant in the ways of the empire, while also being more cooperative. The *mitmaqkuna* brought in were supposed to instruct the locals in the language, laws

and religion of the empire, and to keep them in check by serving as a garrison (Cobo 1979 [1653]:191). This strategy of pacification, though costly, could be rapidly implemented, and the desire to quickly calm conquered groups led to the use of resettlements in practically every part of Tawantinsuyu. Even though the empire still experienced frequent localized rebellions as a correlate to rapid territorial expansion (Murra 1986:52), the *mitmaqkuna* strategy was probably important in making uprisings less frequent and less effective than they would have been otherwise.

The other type of primary objective for forced migrations under the Incas was economic. Of course, because every subject had an economic obligation to the state, every *mitmaq* project had an economic aspect, but there were projects where hundreds or thousands of tributaries were relocated explicitly to derive an economic benefit. The goal was often to increase agricultural production to support military endeavors or general state activities. In a number of cases, the Incas acquired large tracts of land that, in the eyes of the empire, were underinhabited and underutilized, but which with some effort could be very productive assets. These "fixer-uppers" were often valleys that required investments in clearing, terracing, or irrigation to bring them into production, and the Incas would bring in *mitmaqkuna* to improve and farm the land. Maize and coca were often the desired products of these programs, both being essential to Inca modes of administration and ceremony.

Several examples of such economically motivated *mitmaq* projects are known through ethnohistorical records. Perhaps the most common of such projects was the relocation of provincial subjects to cultivate the royal lands in the greater Cuzco region. Farther afield, the Cochabamba Valley in Bolivia was the location of a notably large-scale project, wherein the emperors Topa Inca and Huayna Capac removed almost the entire original population and replaced them with much higher

numbers of people, up to 14,000 tributaries, from various regions of the empire. The purpose of this massive re-development project was apparently the large-scale production of maize, mostly to provision the army (Wachtel 1982:214; La Lone and La Lone 1987:51). However, the majority of the laborers in those fields may only have been serving their yearly *mita* obligations, and were not residing permanently in the valley. They would not have been considered *mitmaqkuna*, but there were still substantial numbers of actual *mitmaqkuna* who oversaw production and storage, not to mention those serving in other capacities (Wachtel 1982:213-214). Elsewhere, in the Pomasqui and Pelileo Valleys near Quito, the hot semiarid climates had been avoided by the natives of the region, but the Incas brought in *mitmaqkuna* to create irrigation works and farm the land, growing coca in the Pelileo region (Salomon 1986a:164-167). Not only did these policies produce goods for the empire, but they provided local leaders access to prestige goods, an enticement to co-opt them into the Inca administration (Salomon 1986a:166-167), thus avoiding the heavier investments required by instituting direct rule.

The Incas utilized *mitmaqkuna* to carry out other types of economic projects as well, including mining of raw ores and clays, manufacturing goods such as ceramics and metals, increasing and managing camelid herds for transportation and textile fibers, etc. For example, the Incas used *mitmaqkuna* along with native inhabitants to work gold mines in the regions of Carabaya and Chuquiabo, both near Lake Titicaca (Berthelot 1986:74). But, as with the Cochabamba Valley project of Huayna Capac, it is important to distinguish between workers brought in temporarily to serve their *mita* and those properly classified as *mitmaqkuna*. Furthermore, it bears emphasizing that the temporary *mita* labor obligations served by *mitmaqkuna* cannot necessarily be

equated with the primary objectives of resettlement, because all subjects were required to contribute labor to the state in some form.

In other situations, people were relocated for military aims apart from the goals of pacification and control. Such military objectives included the manning and maintenance of outposts to protect the borders from outside threats, to control movements within the empire, and to serve as staging areas for further conquests. These assignments would sometimes require permanent populations, so *mitmaqkuna* were often given those duties. The dense concentration of forts around Quito that formed a sort of Andean Maginot Line (Salomon 1986a:148) were probably manned at least in part by *mitmaqkuna*, if not fully. Those manning the forts would also be available to respond to other contingencies, such as rebellions in their assigned provinces or in neighboring ones. *Mitmaqkuna* in Chupachu territory in the province of Huánuco (e.g., Ortiz de Zúñiga 1972:47, 187) illustrate another military duty, that of guarding bridges.

Finally, the Incas definitely resettled large numbers of people to serve religious and ideological ends. *Mitmaqkuna* were probably attached to numerous major shrines around the empire to cultivate land and provide other services in support of the state religion. A most notable example is the ceremonial zone of Lake Titicaca, which included the Copacabana Peninsula and the Islands of the Sun and the Moon, where there lived ethnic Incas as well as *mitmaqkuna* representing more than forty other ethnic groups (Ramos Gavilán 1988 [1621]:84-85). The most complex and fascinating instance of resettlement for ideological purposes involved the area around the capital of Cuzco. There the Incas brought in people from every region in Tawantinsuyu, and made them reside in sectors that mirrored the orientation of their homeland within the Inca realm, creating an ethnic landscape around Cuzco that may

have been "a miniature replica of the empire" (Hyslop 1990:64). Moreover, this massive transformation of Cuzco required sending great numbers of ethnic Incas and non-Incas from the Cuzco region out to the provinces to serve as *mitmaqkuna*.

Costs of Resettlement

With the relocation of many thousands of people over hundreds or even thousands of kilometers, the Incas undoubtedly bore heavy costs in administration and lost production. In addition, even though the military strength of the empire likely served as a sufficient threat to coerce people to move when so ordered, the Incas still invested in compensating and rewarding the migrants. All of the resettled subjects may have received generous compensation, as various chroniclers described the *mitmaqkuna* as receiving two years of subsidies after transplantation, including supplies from state stores, llamas, houses built by the locals, and help from the locals in farming their lands (Murra 1980:180-181). Furthermore, those with permanent labor assignments, as already mentioned, were exempted from the regular *mita* obligation. In many cases, the Incas rewarded the *mitmagkuna* with gifts, special treatment, and positions of responsibility, most likely in an effort to mitigate the negative effects of being forced to migrate. For one, *mitmaqkuna* were provided with textiles and other gifts as part of their "severance package." The Incas awarded honors and women to the men assigned to pacify newly conquered groups (Rowe 1946:270), and *mitmaqkuna* "were given some privileges so they would appear to be more noble" (Cobo 1979 [1653]:190). Even those relocated because of hostile attitudes were awarded responsible positions, as with the Cañaris and Chachas, who were often given policing assignments throughout the empire, and in a further effort to win the loyalty of those two groups, the Inca Huayna Capac included Cañaris and

Chachas in his personal guard (Espinoza 1988a:345-346).

Other Variables

As delineated in Chapter 1, there are a number of other important variables that may factor into the decision-making process when an empire relocates its subjects. The following describes how the Incas are known to have dealt with the advantages and disadvantages of many of these economic, political, social, and logistical issues.

Economics: Mitmaqkuna Labor Service and Occupations. To carry out the objectives of Inca resettlement projects, every *mitmaq* would fit into one of two categories of labor service under the Incas, as defined by Julien (1982:122): those who were given permanent assignments, and those who were part of a general pool who could be recruited for temporary projects or later assigned to a permanent service. A *mitmaq* with a permanent assignment would also generally fall into the classification of *camayoq* (*camayoqkuna* in the plural, *camayo* in the hispanicized singular), which designates a tributary with an occupational specialty. The *camayoqkuna* served the state by working full time in their occupation, which could have been one out of many, including weaver (*chumpicamayoq*), *quipu* reader (quipucamayoq), coca grower (cocacamayoq), saltmaker (cachicamayoq), etc., with the fruits of those labors directly controlled by the state. Others, rather than producing goods, constructed or maintained state facilities. Many camayoqkuna resided within their original province, but large numbers of them were made to permanently move to other provinces, and hence became *mitmaqkuna*. Despite their occupational devotion to the state, the *camayoqkuna* were still expected to support themselves, and in the highlands were given access to land they could farm, while on

the coast, they were allowed to support themselves by trading some of the goods they produced (Rostworowski 1975).

A great number of *mitmaqkuna* with permanent labor assignments were those who served as soldiers or guards. Of course, not all soldiers were *mitmaqkuna*, as many of them served in the Inca army as part of their mandatory service to the state, and went back to their places of origin once their tour of duty was complete. However, there are cases where soldiers became *mitmaqkuna* by staying behind in the regions where they had been warring, and had been granted lands by the Incas. This was the case with the Guayacondos who remained in northern Ecuador after participating in the conquests of the Cayambis and Caranques (Espinoza 1988b:13-14). Full time soldier *mitmagkuna* were often stationed in forts, and at least some were called *pucaracamayoqkuna*, as were some of the *mitmaq* soldiers stationed in the province of Huánuco (e.g., Ortiz de Zúñiga 1972:177). Pucaracamayoq could well have been the general term for these types of soldiers, as it designated a permanent, hereditary position. Their main duties included keeping the local people in check and controlling borders. Others may have had policing duties, such as controlling the interactions of the natives with the elites residing in Inca administrative centers, such as is suggested for the Chacha and Cañari *mitmaqkuna* stationed near Quito (Salomon 1986a:160-161). The Incas entrusted those serving in such positions with substantial responsibilities. As with other *camayoqkuna*, those serving in the forts or garrisons were usually given land to support themselves, though they may have served on a rotating basis, as described for the forts in Chupachu territory, where those serving their turn in the forts were supported by the labors of others, and had only to make weapons, while those not serving were farming the lands allotted to them by the Inca (e.g., Ortiz de Zúñiga 1972:179, 187, 197, 227).

Probably the majority of the people relocated by the Incas labored as farmers, and most of them were likely non-specialized agriculturalists who continued to live and farm much as they had in their home territories. The basic farmer and his family was granted the use of land for their own subsistence, and classified as part of the general tributary pool, subject to periodic temporary labor projects or military service for the state. Other farmers may have been specialists assigned to produce certain crops, such as coca, the distribution of which was controlled by the state. Ethnohistorical accounts tell of examples of state-run coca fields in the Jubones drainage in the southern highlands of Ecuador (Arias Dávila 1582, in RGI 1897:180), and Pelileo in northern Ecuador (Salomon 1986a:166). Others were dedicated to farming the personal royal estates of the Inca rulers, or cultivating other state lands. Those who served full-time producing special crops or working state lands would have been *camayoqkuna*, as they were assigned permanent occupations and their productive output was given directly to the state.

A final occupational category of *mitmaqkuna* is that of the *yanakuna*. The understanding of this term had been rather hazy, often construed as designating mere servants. However, Rowe (1982:97-102) has clarified the issue by showing that the *yanakuna* were actually royal retainers who were accorded rather high status and had the opportunity to advance to administrative positions. They may have served the Inca ruler directly, under other Inca nobles, or under the nobility in the provinces; their duties ranged from being personal servants to serving at temples to cultivating the Inca's estates. *Yanakuna* were picked from the most promising young men in the provinces, and the status, once bestowed by the Inca, was hereditary. A great many of the *yanakuna*, especially those serving in Cuzco, would have been *mitmaqkuna*, as they permanently resided outside of their homeland. But there were undoubtedly

those who served in their home provinces, and thus would not have been considered *mitmaqkuna*. According to occupational assignment, a *yana* could also have been a *camayoq*, and as Rowe (1982:96) points out, such a subject could have *mitmaq* status as well. Thus, these three categories were by no means exclusive, but could overlap, such that a subject could fit into one, two, or all three categories (Rowe 1982:96).

One other class of people that could conceivably be labeled as *mitmaqkuna* is that of Inca nobility who lived and served as administrators in the provinces. However, this designation does not seem to have been applied to nobles, and in the Inca conception, it may not have been appropriate; the designation of *mitmaq* may have been reserved only for those obliged to move by the Incas. Instead, there were other terms used to refer to the office-holding Incas, such as *auqui* and *tocricoq* in Quichua, and *orejón*² in Spanish. This is in contrast with those people who were nonelite Incas or who belonged to ethnic groups that were accorded the status of Inca by privilege. The members of these groups frequently participated in resettlement projects and were known as *mitmaqkuna*, although they had a higher social standing than most other subjects in the provinces.

Political Organization and Administration. The Incas had two different approaches to integrating resettled people into the political structures of their assigned provinces. As a general rule, those *mitmaqkuna* who served as *yanakuna* or *camayoqkuna*, or who had other permanent labor assignments, served the Inca government directly, exempt from the control of indigenous authorities (Rowe 1982:105-106). Because one of the main obligations of lower-level local leaders was

 $^{^{2}}$ Orejón translates as "big ear." The Spaniards applied this name to Inca nobles because the latter wore large ear spools that required the stretching of the ear lobes.
recruiting labor, and the *mitmaqkuna* with permanent labor assignments were not subject to that process (Julien 1982:122), it makes sense that these immigrants were subject only to the higher levels of Inca administration of their new province. In fact, these *mitmaqkuna* were counted in the census of their place of origin for the purposes of allocating labor obligations in those territories (Julien 1982:122). But because they were exempt from general labor duties in their homeland, they were not affected by the local political structure in their former home in any other significant way. This continued accounting of *mitmaqkuna* in their place of origin. Under the Incas, the continued accounting in the home provinces allowed the state to more easily recruit replacements in case of depletions in the numbers of *mitmaqkuna* (Julien 1982:123). However, the need to distribute a tally of all *mitmaqkuna* to each home province during periodic census counts, meant that this administrative strategy added something of a burden to the imperial accounting and communication systems.

In contrast, it may be that the non-specialist *mitmaqkuna* who were part of the general pool of tributaries were incorporated into the regular political organization of their assigned province. However, Rowe (1982:106) found it difficult to find documentation of such situations. This lack of evidence suggests that the majority of *mitmaqkuna* were given permanent labor assignments, so that few were non-specialists subject to local leaders and labor recruitment.

The Incas' idealized system of decimal administration also applied to the general governance of *mitmaqkuna* and directly affected the determination of the numbers of tributaries chosen to relocate. *Mitmaqkuna* were assigned to regions in multiples of 10 or 100, based on the units defined under the system (Julien 1982:123).

These numbers were derived as a percentages of the populations in the provinces from which they came, which were ideally to contain 10,000 tributaries each, or in other cases, multiples of 1,000. For example, inhabitants of the province of Huánuco were sent in groups of 200 to serve as garrisons in Quito and Chachapoyas, 200 being exactly 5% of the total ideal population of Huánuco of 4,000 (Julien 1982:Table 5.6). This method of determining numbers of people for relocation could be reflected in the Spanish chronicles, which often give nice round numbers for the quantities of *mitmaqkuna* in provinces throughout the empire. It is possible that those accounts gave rounded numbers based on general impressions, but more likely reflect the actual assignments as established by the Incas.

Social Considerations. The scale of resettlements in Tawantinsuyu resulted in extensive mixing of ethnic groups within the provinces of the empire. The Incas tended to bring settlers from several different ethnic groups into each province subjected to resettlement rather than simply moving in large numbers of people from a single group. In Abancay, for instance, the *mitmaqkuna* came from up to 15 different regions (Espinoza 1973:232). However, interactions between members of different groups were probably heavily limited by the state. Travel was restricted (Rowe 1946:271), and colonists were placed in separate settlements according to ethnic affiliation (see below). These practices undoubtedly played an important part in addressing the state's aims of pacification and control.

Furthermore, the Incas did not aim to create a happy melting pot, but rather enforced the maintenance of existing group identities. Notably, they compelled their subjects to exhibit the traditional markers of their ethnic identity (Rowe 1982:111), so *mitmaqkuna* would have continued to wear the clothing and headgear of their home territory. In this way, any citizen of the empire could be immediately identified as to

ethnic origin, enabling the Inca government to keep tabs on the subject populations and easily restrict mobility. These policies served to reinforce ethnic identities and divisions between different groups. Perpetuating divisions could also have facilitated one duty of the *mitmaqkuna*, which was to help keep the locals in line by, in essence, spying on them and reporting about them to the state (Rowe 1982:110); colonists may have been less willing to perform this duty had they been allowed to forge closer ties with their new neighbors. This level of mistrust, added to likely resentment of the locals regarding the influx of outsiders, could have significantly inhibited the formation of alliances between different ethnic groups with little direct intervention by the Incas.

Logistics. How the Incas dealt with the logistics of resettlement was undoubtedly determined based on the circumstances of each individual project, such as the objectives of relocation, the behavior of the people to be removed, their range of skills, etc. While listing every possible permutation may or may not be useful, from a number cases that have been studied through ethnohistory, we can develop a general pictures of how the Incas dealt with the overall logistics of relocation, including who to move, where to move them, how many of them to move, and how to settle them within their assigned provinces.

Because of the vastness of the territory controlled by the Incas, the re-dispersal of ethnic groups in the Spanish colonial period, and the incomplete nature of colonial records, it is impossible to come up with a complete inventory of who was moved where under Inca rule. But it is apparent from the ethnohistory that Inca resettlement projects were pervasive, and that practically every province was subjected to resettlement to some extent. Thus the decisions to made were not whether a group was to be broken apart by relocation, but how it was to be done.

As for where to move the *mitmaqkuna*, the Incas did not balk at moving groups of them over very long distances. This is clearly illustrated by the reports that the Incas brought settlers to Cuzco from nearly every province of Tawantinsuyu (Rowe 1946:270), meaning some of those colonists were moved from over 2,000 km away. Various Spanish documents mention Cañaris from the southern highlands of Ecuador being sent as *mitmaqkuna* to many parts of the empire, especially settlements in the greater Cuzco area, and residents of Lake Titicaca likewise were noted to be relocated to parts far and wide. Espinoza (1988a:345-346) notes that three ethnic groups, the Cuzcos,³ the Cañaris, and the Chachas, were spread throughout the empire, and that there was not one province that did not contain *mitmaqkuna* from one or more of those groups, reducing their numbers in their home territories by more than 50%. Many other ethnic groups were likewise moved great distances throughout the Andes.

However, the Incas did not relocate people arbitrarily. For example, the chronicler Bernabé Cobo (1979 [1653]:189-190) notes that they took care to move *mitmaqkuna* to environments similar to those of their original homes. Placement in similar environments probably mattered most in the case of agricultural *mitmaqkuna*, because their productivity depended greatly on knowledge of how to grow crops in their specific ecological setting. Those who could grow corn on the Peruvian coast lacked the know-how to immediately be able to grow it in the highlands, and vice versa. Another consideration for actually implementing this rule stems directly from

³ This term refers to settlers who originated in the Cuzco region, but their ethnic affiliation is not very clear. Rowe (1946:189) lists a number of different groups who probably inhabited the region before the Inca expansion, all of whom presumably spoke Quichua and were either Incas by blood or by privilege.

the effects of altitude, as people born and raised in the lowlands would suffer upon reaching the highlands and being forced to work, and the reverse would be true with people from the highlands. Even though people can adapt to such changes rather quickly, and be able to conduct heavy labor after just a few weeks or months, altitudinal adjustments could still have resulted in losses of productivity on a level unacceptable to the state. But the Incas may have been actually considering basic climatic factors such as temperature and rainfall when resettling some groups, as shown by the group that was transplanted from the hot, dry, coastal region of Nasca to a similar environment along the Apurimac in the sierra (Garcilaso 1966 [1609]:178).

At any rate, relocation between regions of compatible environments was not an absolute rule. The obvious exception to this rule is Cuzco, which contained residents from all of the environments within the empire, and there are other examples, such as the silversmiths from Ica on the Peruvian coast who were brought to the highland Cochabamba Valley of Bolivia (Wachtel 1982:203). The distribution of craftsmen contrary to the environmental compatibility rule is not surprising, as the original distribution of skilled artisans would be very uneven, depending on regional specialization, and the Incas needed their skills throughout the empire. Furthermore, a change of environment would not necessarily affect their craft work, except for dealing with acquiring raw materials, which would change no matter where they were relocated. Likewise, the distribution of military *mitmaqkuna* may not have taken into consideration the compatibility of settings, as such duties would be similar in any posting.

The numbers of people moved into and out from the provinces varied greatly, but the percent of population in each province represented by *mitmaqkuna* was significant, ranging from 10 to 80%, as estimated by Rowe (1982:107). The specific

balance of native versus non-native residents was of course a product of how many people were originally removed and how many brought in. Behavior of the local inhabitants was a major influence on the quantity of people removed: in some regions, higher numbers were removed when the locals resisted initial Inca conquest or rebelled later. In at least a few areas, the entire native population was removed, such as in Ayaviri and Paria near Lake Titicaca. Both of those territories were located along the main north-south Collasuyu road, Ayaviri on the north side of the lake, and Paria on the south, and after removing the local populations, the Incas may have used the centers within each as military depots or staging areas (Julien 1993:187). The Abancay region, west of Cuzco in the southern Peruvian highlands, also appears to have been subjected to total population replacement, with the *mitmaqkuna* dedicated to agricultural production, rather than military aims (Espinoza 1973:230). Overall, it appears the numbers of people moved were mainly determined by the objectives of resettlement, and formalized into multiples of ten according to the structures of Inca decimal administration.

Where the *mitmaqkuna* were settled within their assigned provinces may have depended most on their occupational assignments. Agriculturalists, whether generalists or specialists, were more likely stationed at locations outside the provincial and local centers. They may have been given houses vacated by the relocation of the original inhabitants or as a result of losses in warfare (Murra 1980:177).

It is not clear whether *mitmaqkuna* residing outside of major centers always formed communities separate from the locals. The data from the 1562 *visita* of the province of Huánuco (Ortiz de Zúñiga 1967, 1972) suggest that colonists were segregated by settlement, keeping members of the same ethnic group together, and

within the province, all *mitmaqkuna* settlements were concentrated together in two discrete clusters. More mixing of populations probably occurred at the larger sites, where the resident populations could have included not only Inca nobility, but mitmaqkuna and locals. Certain mitmaq craft specialists and yanakuna also would been assigned to the centers of Inca administration. Possibly even greater numbers of people quartered at those sites were transitory, coming from within and without the region in fulfillment of various duties for the state. These could have been soldiers, messengers, and herders in transit, and other subjects serving their *mita* at the sites. The major Inca center of Huánuco Viejo is an extreme example of this phenomenon, where 30,000 people reportedly served at the site, most of them only stationed there temporarily (Thompson 1972:64), and thus they should not be considered as *mitmaqkuna*. In other situations, those designated as garrisons to pacify and control the locals may have been installed in forts, which could have been pre-existing strongholds or newly constructed forts. Alternatively, they could have been stationed within imperial centers, as related by Cobo: "...the majority of the mitimaes who were made to go to recently subjugated towns settle in the provincial capitals so that they could serve as a garrison and presidio..." (Cobo 1979 [1653]:190). The smaller Inca installations, such as *chaski* stations, were often fully staffed by locals, with occasional imperial representatives and transplanted laborers assigned to the smaller *tambos.* Of course, in those provinces where the entire local population had been removed, no local people were available to serve in those positions, and thus the installations were necessarily staffed by colonists.

Mitmaqkuna were moved as family units, composed of a married man, his wife (or wives), and their children. Under Inca administration, only married males were counted as tribute payers, and they were the unit used for calculating labor

assignments and resettlements. Thus, keeping families together was to some extent a product of accounting, but may have been something of an incentive, as breaking them apart could have exacerbated the resentments of conquest and forced migration. In addition, the practice would have served to protect the children, i.e., the future tributaries, who may have suffered if separated from parents. However, this should not be interpreted to mean the Incas were espousing "family values." To the contrary, the most attractive unmarried females were often separated out and kept as chosen women, known in Quichua as *aqllakuna* (Rowe 1946:269). Aqllakuna were educated by the Incas, and later either dedicated as servants to the state religion, or given as wives to men, such as elites or soldiers, who were deserving of special honor. Likewise, promising young males were often selected as *yanakuna*. As a result, *mitmaqkuna* were usually relocated as families, but not necessarily including all of their children.

Changes in Mitmaqkuna Policies Through Time

As with many imperial practices, the nature of Inca resettlement policies changed over time. The first *mitmaqkuna* were likely sent out by Pachacuti (Murra 1980:179), the Inca who began major territorial expansion of the Inca polity. Pachacuti probably transformed the existing Andean archipelago settlement strategy into a more far-reaching tool of economic exploitation and political control. His son and successor, Topa Inca, then increased the quantities and the privileges of colonists (Murra 1980:179). Later adjustments in the use of *mitmaqkuna* are revealed in more detail in the ethnohistory. For instance, records for the Cochabamba Valley of Bolivia show a change between the resettlement strategy of Topa Inca, who conquered the region, and his successor, Huayna Capac. The *mitmaqkuna* brought in

after Topa Inca's conquest were modest in numbers, with the majority having the military function of guarding the border, and the rest having the economic function of agricultural production. In contrast, under Huayna Capac, the number of colonists increased greatly, and their major focus switched to the economic role of maize production (Wachtel 1982:201-202). Wachtel characterized the change in this manner: "...the conquering Inca was succeeded by an Inca administrator, so that henceforth the economic function of the mitimas took precedence over their military function" (Wachtel 1982:202).

The shifts seen in the Cochabamba Valley between the reigns of the two Incas could also have been carried out by Topa Inca himself in other regions that had been conquered and consolidated earlier in his reign, or in that of Pachacuti. Furthermore, Huayna Capac is known to have ordered resettlements similar in kind to those of Topa Inca, notably the settlements of the Guayacondos near Quito (Espinoza 1988a:7-63). Thus, it seems less that Topa Inca and Huayna Capac had different philosophies for employing *mitmaqkuna* stemming from being a "conqueror" versus an "administrator," but rather that both adapted their strategies of utilizing colonists in the provinces according to changing circumstances in those regions and in the empire as a whole.

It is worth noting that the distribution of ethnic groups at the end of Inca rule did not remain static, and in fact became even more complex with the arrival of the Spaniards. Once it was clear that the Inca rulers no longer had a tight grip on them, many *mitmaqkuna* simply picked up and walked home. Over time, many more indigenous people, *mitmaqkuna* among them, left their homes to work and live in other provinces in an effort to escape the heavy tribute burdens imposed by the Spaniards. The Spanish rulers also moved numbers of people for their own ends,

notably the exploitation of mineral resources and the reduction of rural settlements to concentrate populations. As a result, colonial documents detailing settlements of *mitmaqkuna* often reflect Inca resettlement practices as filtered through these acute changes. Nevertheless, many *mitmaqkuna* remained in their assigned provinces, probably as a result of Spanish control and because of the investment they had already made in establishing homes, fields, etc. Furthermore, the ties between the colonists who had been resettled longest and their provinces of ethnic origin could have weakened with time and distance, with the result that the pull to return home was lessened. But even after all of the turmoil and the passage of more than four and a half centuries, there are many Andean communities that maintain in their oral traditions that they are descended from *mitmaqkuna*, often recalling their lands of origin and specific ethnic affiliations.

Discussion

Despite the magnitude of resettlements carried out by the Incas, archaeological knowledge about state-directed, long-distance, permanent relocations in Tawantinsuyu is scarce. The ethnohistorical data are very informative, but certainly leave many gaps. Archaeology is needed to confirm the general picture derived from ethnohistory, and to delve further into understanding the specific circumstances of individual cases and how those affected Inca decision-making, and how the Inca state functioned as a whole. With this project, the Saraguro region of Ecuador serves as a case study for this type of approach. The next three chapters, in describing the natural and cultural environment, the relevant ethnohistorical information, and related archaeological investigations in the region, present the context within which the field

work was conducted, as well as providing a number of clues as to the circumstances encountered by the Incas upon their arrival.

CHAPTER 3: SARAGURO: THE CULTURAL AND NATURAL ENVIRONMENTS

The project area is located in the northernmost part of the province of Loja, which is the southernmost province in the highlands of Ecuador (Figure 3-1). The field work was conducted mostly within the *cantón* of Saraguro, and partly in the *parroquia* of San Lucas to the south of the town of Saraguro. Because the inhabitants of the region effect significant impacts on the landscape, which directly effect the preservation of archaeological sites and how field work is conducted, the present day cultural context is outlined below. In addition, the modern environmental setting is presented to provide a context for modeling the prehistoric setting and how the inhabitants of the past interacted with the landscape and exploited its resources. It is not, however, assumed that all ecological conditions have remained constant for the two thousand years or more of human occupation.

CULTURAL SETTING

The majority of the rural population of the region is composed of indigenous Saraguros. These people are those who trace their presence in the area to prehispanic times, although this designation is more strongly an ethnic one than a biological one, as there has been some inter-marriage with members of outside groups. The Saraguros are considered one of the most affluent native groups in Ecuador due to their success in cattle raising and farming (see Belote 1984 for a detailed study of their subsistence strategy). The Spanish *encomienda* and hacienda systems were never predominant in Saraguro; this was due, at least in part, to the undesirability of the local environment for the Spaniards' aims. As a result, the indigenous people retained title to much territory during colonial times (Belote 1984:98), and today most



Figure 3-1. Location of Saraguro within Ecuador.

Saraguro families own their own farmland and houses, with some having several houses and land holdings spread among far-flung communities. The Saraguros speak Spanish and Quichua, though there are many who speak only one of the two languages, with more Spanish-only speakers living closer to town, and the Quichuaonly speakers residing in the more remote communities. An effort is now being made to teach Quichua in the schools, with the result that many of the children are learning to speak a form of standardized Ecuadorean Quichua that differs from the local dialect that their grandparents may speak.

In general, the Saraguros are farmers and herders, growing corn, potatoes, beans, wheat and other assorted fruits and vegetables, and tending cattle and sheep. Unfortunately, llamas and alpacas have disappeared from the daily life of the Saraguros,¹ and little is known of what role these camelids may have played in earlier times. Currently, most families own their own land, and some families have quite extensive holdings, with parcels in various communities within a range of ecological zones. Within the project area, houses are located in the lower elevations, usually between 2,300 and 2,700 m, forming settlements of semi-clustered to dispersed houses. The rural areas are divided into distinct communities with recognized boundaries that enclose most of the residences, community buildings and surrounding farm or pasture lands. Many agricultural fields are located within the same elevations as the homes, and many homes have gardens or fields directly adjacent to them. Fields of corn and other basic crops are planted up to 2,800 m in elevation, while potatoes and other tubers are often planted in higher zones, up to about 3,000 m.

¹ In fact, the only llamas living in Saraguro today are those owned by the Presidente del Municipio, who is from Guayaquil. They can often be seen grazing in the municipal soccer stadium.

Terraces are not constructed for agriculture, as the climate allows for easy cultivation of level to steeply sloped lands, and enough favorable land is available at the sub-2,800 m and sub-3,000 m levels where subsistence needs are met without having to invest in terracing or other intensive project needed to use higher lands. However, some prehistoric terraces are re-used for modern agriculture.

The Saraguros create their pastureland for the most part in the middle to upper elevations, between roughly 2, 600 and 3,000 m, with some parcels and fallow fields being used for pasturage lower down and within the communities. Constant pressure to acquire more pasture is forcing the cutting of more and more forest and the use of higher and less desirable lands. Slash and burn is the usual method for clearing new pastureland, and some rather sensitive ecological zones are rapidly being eliminated. There are occasional agricultural fields interspersed among the pastures, and in many locales there are *chozas*, which are small houses built for temporary shelter in the less hospitable conditions of the higher elevations.

The material culture of the Saraguros is a mix of modern and traditional. Most families still use grinding stones to prepare various foods, with large metates used outdoors and small mortars used indoors. Ceramics are still used extensively, and they are of a very plain and utilitarian style, which, unfortunately, is difficult to distinguish from certain prehistoric ceramics. Houses are built of adobe or *barreque* (wattle and daub) with wooden roof beams and ceramic tiles covering the roofs. There is some variation in building materials these days, with cinder blocks becoming common and having an association with higher economic status. Traditional house forms have changed quite a bit within the twentieth century, with round or oval shapes that were common earlier in the century giving way to standardized rectangular styles (Belote 1984), and the prevalent modern variations have been

documented by Calderón (1985). Backstrap looms, similar to the ones illustrated by Guamán Poma (1936 [1615]) are still used in many homes for weaving the cloth used in making traditional articles of clothing. Food is often cooked over a fire in the home, though gas stoves and even gas ovens are common. Electricity and running water are also available in many of the communities, and many communities are accessible via dirt roads, with some notable exceptions.²

Indigenous people in Ecuador are beginning to assert their rights more openly and demand attention from the government and respect from the general populace, and the strengthening of ethnic identities is important in this process. The Saraguros are involved in this movement as much as, if not more than, the other indigenous ethnic groups in the country. Their connection with the past is maintained in several ways, and these days it is being strengthened by the revival of prehispanic customs, such as the Inti Raymi festival. The Saraguros' affinity for the Incas is illustrated by the belief that they wear black as a sign of mourning for the death of Atahuallpa, the Inca captured and put to death by the Spanish conqueror Francisco Pizarro. According to their oral traditions, their ancestors were *mitmaqkuna* brought into the area from the Lake Titicaca area, or possibly Cuzco, by the Incas, and thus they perceive no connection with the so-called *gentiles*, the inhabitants of the area before the coming of the Incas. Thus, the Saraguros' connection with the past goes back to before the Spanish conquest, yet stops at the Inca period. I heard it expressed several times that they are unsure of their past before that time, and many are interested in

 $^{^{2}}$ I was told that the community of Gurudel, to the east of Saraguro, actually turned down a chance to have a road put through to their community. Apparently, some people thought it would make it easier for thieves to drive in and steal their cattle or other property. This same community also denied us permission to survey their land.

investigating their origins as a way of strengthening their ethnic identity. As it stands, the Incas hold a place of veneration in the lives of the Saraguros, and places believed to have been Inca sites are being protected, and even used for ceremonies. However, the perceived disconnection from the pre-Inca population leads to a generally apathetic attitude toward earlier cultural remains, with a few notable exceptions, such as items held to be valuable or collectible, like gold artifacts or stone axes, and those with curative properties, as with the legs of polypod ollas.

The Saraguros, as a successful indigenous group that maintains a strong group identity, have attracted a number of anthropologists and other scholars in the past couple of decades, and as a result, there have been numerous articles, theses, and manuscripts written. Most notably, James and Linda Belote, two anthropologists from the USA who began their Saraguro experience in the Peace Corps, have probably dedicated more time than any other outsiders to the study of the Saraguros, and as a result have written the most about the region (e.g., Belote 1978; Belote 1984; J. Belote and L. Belote 1977a, 1977b, 1985; L. Belote and J. Belote 1981, 1984, 1989). Other publications include treatments of health issues (Finerman 1982, 1983, 1984), textiles (Meisch 1980-1981), history (Céleri A. 1966; Vacacela 1993), socioeconomics and culture (Punín de Jiménez 1974a, 1974b, 1975), subsistence (Tual 1979), development issues (García et al. 1982), folklore, festivals, and rituals (Landivar 1969; Mendizabal 1981), and inter-ethnic relations (Masson 1977, 1983; Schmitz 1977). Many Saraguros are now writing about their own people and culture, as seen in the volume on rituals and festivals compiled by the Belotes (L. Belote and J. Belote, editors, 1994). For perhaps the most comprehensive bibliography dealing with the people of Saraguro, including many unedited manuscripts and unpublished theses, see J. Belote and L. Belote (1994a).

In addition to the indigenous Saraguros, mestizos comprise the other major group represented in the region. However, the term "mestizo" is not generally used in Saraguro to refer directly to a social or cultural class of people. Instead, those who would be called mestizos elsewhere in Latin America on the basis of their mixed indigenous and Spanish ancestry are known as *blancos* (Belote 1984:53-54), and they more or less identify with the post-colonial Ecuadorean culture rather than with the indigenous culture. Those who live in the town of Saraguro are also known as Saragurenses, *blancos del centro* or *blancos de la plaza*. The Saragurenses almost exclusively speak Spanish and are involved mostly in non-subsistence economic activities in town, with a smaller percentage involved in farming and herding in the outskirts of town and in the rural communities. They are in control of most of the non-agricultural businesses in town and hold the governmental posts.

Another subset of the *blancos* are the *blancos del campo*, who live in rural communities. They make their living much in the same manner as the indigenous people, yet they speak Spanish almost exclusively and consider themselves direct descendants of the Spaniards. The perception of European ancestry reflects the distinction of the *blancos del campo* from the general mestizo population. Local lore holds that those living in the Paquishapa area are descended from Spaniards who settled in Zamora in the lowland rainforest to the east and fled to Saraguro during a native Shuar revolt in the 16th century (Belote 1984). The *blancos del campo* have a consistent manner of dress, which appears standardized to the same extent as the dress of the indigenous people, and also like the Saraguros, they live in rural communities, including a number to the north of Saraguro, such as Baín and Turucachi near the town of Paquishapa. Though the territories of the two groups are more or less

separate, their is some overlap in the intermediary communities such as San Isidro, where households of *blancos del campo* and indigenous people are interspersed.

Finally, *gringos*³ make up another small, though influential group in the region. This group comprises those white foreigners, mainly from the USA, but also from Europe and other locales, who come to reside in Saraguro as Peace Corps volunteers, evangelists, and academics doing field work. This group is not very cohesive and is constantly in flux as *gringos* come and go depending on their assignments and objectives, and few, if any, can be considered permanent residents. However, the nature of the *gringo* presence in the area has an impact on the ecology, subsistence strategies, religious beliefs, and other aspects of the social fabric out of proportion to their numbers.

Occasional tourists visit the town, usually spending Saturday night and visiting the market on Sunday morning before moving on to more tourist-oriented spots in the southern highlands, such as Vilcabamba. Saraguro does not have welldeveloped facilities for tourists, as the two *pensiones* offer minimal accommodations, and the two main restaurants offer nothing much beyond roasted chicken. Not much effort has been made by the municipal government nor by the local people to promote tourism or improve the accommodations, though the indigenous political organizations have been interested in building a hotel and increasing the tourist trade. In fact, the Saraguro area has a lot of potential attractions for tourists, including the indigenous culture, archaeological sites, scenic spots for hiking or horseback riding,

³ Though the word *gringo* has a bad connotation in many contexts in Latin America, in Saraguro it is mostly used to refer to any white foreigner without malice (as far as I can tell). Other alternatives are "Mister," which is one of the few English words that every child learns in school, and "*suco*," a Quichua term. Most of the white foreigners I met in Saraguro used "*gringo*" as the convenient way to refer to each other.

moderate level mountain climbing, rare plant and animal species and myriad ecological zones ideal for ecotourism. If properly managed, tourism could become an important contributor to the local economy, but without much planning it could become another strain on the environment and local resources and be a medium for outsiders to control the facilities and divert tourist dollars away from the local population.

PHYSICAL ENVIRONMENT

In some respects, the physical environment of the Saraguro area has much of the character common to many other parts of the Andes, yet aspects of its climate and geography make it stand out from other inhabited highland regions of Ecuador and Peru.

Geography

Saraguro is located within a small basin that is drained by the Río Paquishapa, which in turn is part of the larger Río Jubones drainage that empties into the Pacific Ocean (Figure 3-2). Though it is not an official geographical appellation, for convenience I will refer here to the upper part of the Río Paquishapa drainage as the Saraguro Basin. This includes all of the watershed from the confluence of the Ríos Sinincapa and Paquishapa; the town of Saraguro is located in the northwestern section of this basin. The Río Paquishapa flows to the northwest, and the continental divide forms part of the southern and eastern boundaries of the basin, with water on the other side of the divide heading to the Amazon Basin, and ultimately, the Atlantic Ocean. To the south of the Saraguro Basin, the waters around Tambo Blanco and San Lucas drain to the south, and then east to the Amazon Basin after joining with the Río



Figure 3-2. Saraguro geography.

Zamora, which flows north from the city of Loja.

The Andean mountain chain in Ecuador is only about 150 km wide, narrower than in other countries (Baldock 1982), and as a result, the eastern rain forest and western lowland environments are much closer to each other and more easily accessible from the highlands than elsewhere in the Andes. This is particularly notable in Saraguro, where the rain forest is only a day's walk away to the east, yet the local environment is still distinctly highland in nature. Elevations within the project area range from a high of 3,429 m above sea level at the summit of Acacana, to 2,200 m at the Río Paquishapa, which cuts down to 1,500 m and lower as it flows to the Río Jubones. The southern sierra of Ecuador is generally lower than in the northern and central parts of the country, and there are no major volcanic peaks in the south like those to the north. The stretch of the continental divide located in the Saraguro region contains the lowest portions of that divide where the Andes meet the Amazon Basin (Belote 1984).

The river and stream beds in this area are narrow and often very steep sided, and thus are of limited use for irrigation purposes. This is in direct contrast to the large inter-Andean basins that characterize other areas in the Ecuadorean highlands, where there are wide, flat basins with easily accessible water courses. In the Saraguro area, water for irrigation is usually collected from small quebradas as they drain down slope from the larger ridges. River beds are very rocky and usually shallow, and thus useless for transportation. They were once stocked with trout and subsequently overfished. Now, more than anything else, the rivers serve as obstacles and territorial boundaries.

Geology

There are no easily available geological reports specific to Saraguro, so the following review of the geology and related resources of the area is largely based on information gleaned from nation-wide geological maps and reports. The description of the basic geological formations of Saraguro is distilled from information found in the 1982 *National Geological Map of Ecuador* (Ministerio de Recursos Naturales y Energéticos 1982) and the accompanying booklet (Baldock 1982).

The Andean highlands of Ecuador are characterized by a series of large basins situated between two parallel mountain chains running SSW to NNE: the Cordillera Real and the Cordillera Occidental. The eastern Cordillera Real is underlain by metamorphic rocks capped in places with Cenozoic volcanoes, while the western Cordillera Occidental is made up primarily of Mesozoic volcanic rocks and subsidiary sedimentary rocks, with Neogene volcanoes in some of the higher areas. The numerous active volcanoes in the central and northern highlands make the popular phrase "Avenue of the Volcanoes" a very fitting description of the geological setting of that part of the country. However, in the southern highlands, the situation is somewhat different. Here the two main mountain chains run closer together, becoming less distinct geographically, but they can still be differentiated geologically. This situation also creates fewer and smaller basins.

Although Saraguro is outside of the Avenue of the Volcanoes and there are no active volcanoes nearby, volcanism is at the root of most of the geology of the region. Around Saraguro, there are three major geological sequences mapped: the Saraguro Group, the Tarqui Formation, and the Zamora Group. The Saraguro Group lies within the center of the project area and follows the Río Paquishapa to the northwest, while the Tarqui Formation forms a ring around the core of the surveyed zone. The

Zamora Group lies to the south and east of the project area, and a pocket lies at the eastern side of the surveyed area, wedged between the Tarqui and Saraguro Formations.

The Saraguro Group and the Tarqui Formation are both composed of volcanic rocks, with the Saraguro Group being dated to the Oligocene and the Tarqui Formation having a much younger Pleistocene date. The Saraguro Group is mostly made up of andesitic and rhyolitic lavas and pyroclasts, while the Tarqui Formation "is dominated by pyroclastics consisting of rhyolitic to andesitic agglomerates, tuffs, ash-flow tuffs and ignimbrites much of which has been heavily kaolinised and/or silicified" (Baldock 1982:29). In many sectors, more recent sediments or volcanics overly the Saraguro Group. The Saraguro Group may be as thick as 2,000 m, and the Tarqui up to 1,200 m.

The Zamora Group comprises the metamorphic rocks of the southern Cordillera Real. The Zamora Group "is dominantly a thick, undifferentiated sequence of muscovite-biotite schists, although paragneiss and metasomatic granite-gneisses are known towards the east" (Baldock 1982:20-21). The thickness of this group is unknown, but is dated to the Lower to Upper Paleozoic.

Like most of Andean South America, Saraguro is within a seismically active zone. In historic times, five earthquakes classified as "destructive" have occurred within a 100 km radius of Saraguro (Molina and Mena 1958). A principal fault, the Jubones, lies to the northeast of Saraguro, trending east from the coast. Two major fault systems are also close to Saraguro: the Paute system, which travels southwestnortheast passing quite close to the town of Saraguro, and the Portovelo fault, which runs southeast-northwest and passes southwest of Saraguro. Fortunately, there were no earthquakes during this project, but the deforestation of the area combined with the

sometimes frequent rainfall makes the soil quite unstable, and could easily result in disastrous landslides in the area in the event of moderate or strong temblors.

Mineral deposits are found in the surrounding area, but there is currently little industrial exploitation of those resources. About 30 km to the southwest of Saraguro is a gold mine near the mountain Fierro Urcu, and there may also be deposits of copper, silver, lead and zinc within or near that hill (Goosens 1969, Paladines P. 1980). I was informed that a US mining company recently explored the gold mine, but abandoned the effort because it was not economically viable. I would not be surprised if individual prospectors are currently working it. Also, to the west of Saraguro are deposits including tin, lead, zinc, copper, and molybdenum, while to the south are deposits of tin, lead, zinc and manganese and to the east are deposits of tin and tungsten (Goosens 1969, Paladines P. 1980). Likewise, none of these minerals are being commercially exploited. Some of these metals, especially gold, silver, copper, and tin, could have been important in prehistory, but it is unknown if they were exploited then either. Judging by the stories of gold objects being dug out of archaeological sites around Saraguro, gold mining and working may have been an economic focus of the area, but extensive excavation work may be needed to address that possibility.

There are also rock resources in the area, some of which, as opposed to minerals, have been utilized frequently in historic times. For years, people have been exploiting a deposit of travertine located near the community of Puente Chico to the north of Saraguro.⁴ There is an *adoquín* (paving stone) mine that is being worked on

⁴ This includes use of the stone to build the main Saraguro church, and reportedly, for the flooring of the current (at the time of the field work) mayor's new house.

Cerro Sirencapa, along the old route of the Pan-American Highway along that mountain. The stone seems to be a kind of dolomite, and is being used to repair the roads of Saraguro, which were recently torn up for a sewer reconstruction project.

As for prehistorically important rock types, chert is found in the area, but in many cases, it is of low quality. It comes in various shades of green, brown, red, yellow and orange, somewhat reminiscent of cherts from the Franciscan Formation in California. Archaeological sites frequently contain chert flakes, which probably come from higher quality outcrops of chert in the area, but the exact sources of the material were not detected within the survey area. Certain place names are suggestive, especially Loma Pedernal ("Chert Hill"), which is located north of San Pablo de Tenta. There are no major outcrops of obsidian in the area, but the hill León Dormido may be a minor source of obsidian, which is found there in small pebble sizes of up to 3 cm in diameter. Temme (1982) reports a similar source of obsidian 8 km to the northeast of Cubilán, placing it about 30 km from the town of Saraguro. Quartz is also abundant around Saraguro, and is found in many forms, including crystals, quartzite, geodes, and large chunks of milky quartz. Some forms of quartz may have been utilized prehistorically around Saraguro, and quartz crystals could have been valuable for making beads, as they were utilized in this way at the site of Pirincay, north of Cuenca (Bruhns et al. 1989). Veins of quartz could have been important as potential sources of gold, but nothing is known of gold mining in prehistoric Saraguro. Other rocks of value in prehistory include andesite and granite boulders found in abundance in river beds; these rocks were quite suitable for grinding stones.

There are many clay deposits around Saraguro, varying from red to white in color, and in fact, there are spots where people have mined the white clays for construction purposes. I was told that one clay source near Cerro Sirencapa was

recently mined for its commercial potential, but that project was abandoned. The white kaolin clays would probably be desirable for ceramics, especially in prehistory, but nothing is known about which exact clay deposits were exploited.

Lastly, there are some fossils in the area, including petrified wood and fossilized leaves on Loma Huelemón. The dating of these fossils is uncertain, but fossilized wood from the Tarqui Formation has been dated to ca. 25,000 to 34,000 years ago. Petrified wood has been used prehistorically in other parts of the world as a material for making chipped stone artifacts, but the source I encountered in Saraguro did not seem suitable for that task, and I saw no petrified wood in archaeological contexts.

Climate

The general climate of the Saraguro area is classified as *frío y húmedo* (cold and wet) (Gómez E. 1989), which is an apt description to anyone who has spent an extended amount of time there. But, as to be expected in the Andes, the topography produces much variation in precipitation, wind and temperature. Annual rainfall in the area averaged 766 mm between 1963 and 1979, with a standard deviation of 155 mm (Gondard 1983). Another annual rainfall average of about 650 to 700 mm is reported (Belote 1984), though that average is based on records from a shorter time span. A 1979 rainfall map of Ecuador (Ministerio de Agricultura y Ganadería [MAG] 1979a) shows Saraguro within a zone that receives between 600 and 800 mm of rain, but within a 25 km radius of the town the amount of average yearly rainfall varies drastically, from less than 300 mm per year in the heart of the hot and dry Río Jubones drainage to over 2,000 mm annual precipitation east toward the Oriente. Certainly Ecuador in general is known for having a wide range of environments

packed closely together, but Saraguro is an exceptional example of this phenomenon, with such extremes in climate and environment all found within a day's walk.

Rainfall is scattered throughout the year, and there is no commonly recognized seasonality, illustrated by the fact that the Spanish words for summer and winter, *verano* and *invierno* are used to describe hot and dry weather and cold and rainy conditions, respectively, and they can even occur within the same day (Belote 1984:37). But there is an acknowledgement that there are some months with more rainfall than others. One published map shows Saraguro within a zone where there are fewer than four dry months per year, when evapotranspiration exceeds precipitation (MAG 1979b). However, different people will give you different accounts of which months are supposed to be the wet ones. In general, the early months of the year, January and February, are said to be the wettest, and July and August are supposed to be the driest. These trends vary from year to year (Belote 1984:36), and in fact, during the span of this field project, August was a thoroughly wet month, and there was a drought in January and February that caused a lot of damage to the corn crop. Belote (1984:36) reports a pattern of double or triple maxima of rainfall in the area, though the time of occurrence varies year to year. Rainfall can occur in heavy downpours or in drizzling fog-like conditions. The latter rain pattern is referred to as *páramo*, and is basically the same type of weather that prevails in the environmental zone of the same name.

The cycle of corn planting seems to correlate with the perceived wet and dry months, with plowing and planting occurring around October and early November as the rains should be picking up, and the wettest months should come when the corn is growing and needs the most water. Harvest occurs generally around June when the drier months are beginning.

Monthly average temperatures are less variable than rainfall totals, with the average usually between 12° to 14° C (Belote 1984), and daily highs and lows stay between ten degrees above and below the average. In general, the populated areas within the survey zone never reach freezing temperatures, and seldom get very hot. Basically, temperatures vary with the amount of sun and rain, with extended periods of cloudiness and rain producing the coldest days, times when it can take a week to dry a pair of blue jeans. Being so close to the equator, the length of the days is almost constant year-round.

This moderate climate without marked seasonality or severe high or low temperatures is due to the combination of high altitude and location near the equator, while the proximity of the Amazon Basin provides a significant source of moisture. Although there is little variation in climate month to month, there are quite a variety of microclimates produced by the mountainous topography. Especially on large hills, there can be a wide range of conditions depending on elevation, prevailing winds, solar exposure and rain shadow effects.

Ecological Zones

The verticality of the Andes combined with the numerous microclimates around Saraguro produce myriad microenvironments, populated with widely varying plant communities. It is common to encounter a hill with dense forest on one side, while the opposite side is covered only with scrubby vegetation that can thrive in low moisture environments. But despite such a range of microenvironments, the landscape within the survey area can be divided into three broad ecological zones that match the categories used by natives and that condition archaeological survey

strategies. As elsewhere in the Andean, verticality plays a major role in how those environments are arranged and how humans utilize the landscape.

The first major zone is composed of *cultivated lands*, which consist of what little flat land is available along with the land of lesser slope within the lower elevations, spanning from the lowest spots in the survey zone, at just over 2,200 m, upward to around 2,700 m in altitude. A few scattered fields are found above 2,700 m, and these usually are planted with potatoes or other tubers. The cultivated zone also incorporates almost all of the residences of the people living in the *campo*, with fewer houses found as elevation increases. Most cultivated fields are located within a few hours walking distance of the owners' homes. A number of people own fields in several different communities, and in some cases own more than one house, occupying whichever house is closest to the work that needs to be done at any given time. Those with widely dispersed houses often have forms of transportation available other than their feet, including horses and motorcycles; sometimes they can hitch rides or take a bus.

Corn and potatoes are the major crops grown, with occasional wheat fields interspersed. *Habas* (fava beans), are grown within the corn fields, as are the occasional *sambo*, which looks like a watermelon but is actually a squash that the people seldom eat, but more often throw to their pigs. *Oca* (a form of small tuber) is also grown in the corn fields, and most people have gardens close to home wherein they grow supplemental fruits and vegetables, such as *ají* and *rocoto* (types of chile peppers), lettuce, cabbage, apples, peaches, coffee, *tomate de arbol* (literally "tree tomato," which is actually a red tamarillo), *lucuma* (another tree fruit), and *capulí* (semi-wild cherries). Within the lower elevations, most of the land that can be easily farmed is under cultivation, except for land used for buildings, roads, and trails. Corn

is the predominant crop in the lower elevations, and it figures greatly in the lives of Saraguros, while potatoes are more prevalent in the highest cultivated plots, probably due to the less favorable conditions for growing corn as elevation increases.

The second major zone is *pastureland*, which consists of land that has been cleared of vegetation and allowed to grow over with grass as feed for domesticated animals, mostly cattle and sheep, plus the occasional horse, mule, or donkey. Some small plots of pasture are interspersed among the cultivated plots in the lower elevations, but the majority of pastureland is located in the higher elevations and steeper slopes, generally from 2,600 to 3,000 m, with a few scattered plots at even higher elevations. Pasture is usually land that has characteristics that make it less desirable for cultivation, such as excessively steep slope, difficulty of access, or unfavorableness for irrigation. I suspect that the higher elevation itself is the main obstacle to farming, as the environment becomes too harsh for growing the staple crop of corn. However, in spots where pastureland is located on flatter land, there are some small plots of cultivated land, usually planted with potatoes. These potato plots in pastureland may be some sort of risk-management strategy, but could also be a productive way for people to make use of their time while they are watching their cattle.

Virtually all of the pastureland has been cleared of the natural vegetation by use of axe and machete, a great initial investment of labor. The pressure on the forested lands is constantly growing as population increases and more people take advantage of the economically profitable strategy of cattle raising. In fact, over the past several decades, the Saraguros have been colonizing part of the *Oriente* (lowland tropical forest to the east) around the town of Yacuambi as a solution to the shrinking supply of land suitable for pasture. A migratory pattern has developed where many

people have homes in both the Saraguro area and the *Oriente*, and spend parts of their year in each location, moving the cattle between the two. This transhumant subsistence pattern has naturally attracted anthropologists, and as a result there are several works that deal with the Saraguros and their economy (e.g., Belote 1984, Tual 1979).

The third major zone included in the survey area is the *monte*, also referred to as wild, forested or vegetated land. This is actually a catch-all category for all of the lands that are not used for anything other than trails, and is covered with vegetation, which is usually, but not necessarily, made up of native plants. These lands are usually located above 3,000 m, but monte also dominates lower elevations of land that is far from the communities and steeply sloped hillsides closer in. The major plant community is rather thick forest, also known as *cerro* (literally "hill"). Apparently, as recent as the turn of the century, much of Saraguro was surrounded by forest land (Belote 1984), and it is likely that before major human occupation in the region the whole area was covered with thick forest that would have required extensive effort to clear. This category also includes various other plant communities including thick shrub zones, such as found on some hills above Shindar, stands of bamboo, as at the base of Puglla, boggy areas, like that near Paila Loma, sparsely grassy windswept zones, as in higher elevations like Filo de Huaca, drier patches characterized by *achupalla* plants, as on San Vicente at the base of Puglla, and the cloud forests, such as occur on Loma Torre. Outside the survey area, but within the realm of the Saraguros, there are also much hotter and drier lands, such as the *caliente* zone of the Río Jubones drainage, and of course, the wet and warm Amazonian environment to the east.

One major environmental zone that is common in the Ecuadorean Andes, the

páramo, was hardly included within the survey area, and in those cases only in small pockets. The large tracts of *páramo* were simply too far from the core area of habitation and impractical to access for survey. However, the harsh conditions prevailing there would have made it unlikely for any substantial habitation in prehistoric times. The *páramo* areas are characterized by low temperatures of 4° to 10° C, high winds, and constant drizzle and cloudiness. They are located in the higher elevations, generally above 3,000 m (Belote 1984). The land is relatively flat and covered with grasses and shrubby vegetation, including some edible species, and inhabited by a number of different species of wild mammals, such as bear, deer and tapirs. In the past, if camelids were any significant part of the economy, then the *páramos* may have been useful for pasture. Currently, the *páramos* are of little economic significance to the Saraguros, though in the past, they were used as pasture for cattle (Belote 1984).

CHAPTER 4: ETHNOHISTORICAL ACCOUNTS CONCERNING THE SARAGURO AREA

Ethnohistorical records hold the potential to complement archaeological data related to late Andean prehistory, and to illuminate events and circumstances that are not detectable archaeologically. Unfortunately, the available ethnohistorical accounts that concern the Saraguro region are sparse and sometimes contradictory. No *visita* or other detailed document of the area has surfaced, and what data we are left with are mostly tidbits from the major chroniclers referring to the Inca conquest of southern Ecuador, and morsels from the descriptions of the Spanish colonial province of Loja. A number of minor documents dealing with the province of Loja and other subjects give more specific references to Saraguro, but still only refer infrequently to the history of the people of Saraguro and what the Incas did during their reign. But even though the records are lacking in detail and volume, there is still enough information to pursue to some extent the following questions about the region:

- When and under which Inca was the region brought into Tawantinsuyu? Was this accomplished through warfare or diplomacy?
- What is known about the Inca occupation of the region? How did the Incas consolidate their control over the people? What administrative strategy did they use, what types of sites did they erect, and how did the Incas augment the infrastructure? In which Inca province or political division was Saraguro located?
- What was the ethnic make-up of the region during the pre-Inca, Inca, and Spanish colonial times? What is known about *mitmaqkuna* in Saraguro, where did they come from, and what roles did they perform? What is known

about the history, culture, subsistence, religion, economics, and sociopolitical organization of the inhabitants of the region in those periods?

To examine these questions I have drawn on data from a variety of sources. The work of Linda and James Belote has been an excellent guide to ethnohistorical information specific to Saraguro (e.g., J. Belote 1984; J. Belote and L. Belote 1994c, 1994d), as they have been collecting such information for a number of years. The Belotes' research interests include the history of the indigenous Saraguros and their ethnic origins, as well as the prehispanic settlement of the region, thus their scholarship complements many of the aims of this project. Considering the relative rarity of historical documents with specific reference to Saraguro, the range of sources they have gathered would be hard to equal, and many obscure documents have been made available through their work. Chantal Caillavet (1987, 1989)¹ has delved into the question of the ethnicity of the prehispanic inhabitants of the province of Loja and parts of the modern provinces of El Oro and Zamora Chinchipe, and thus covers the pre-Inca natives and possible *mitmaqkuna* of the Saraguro region. Through that work she has published a number of insightful sections of documents from archives in Ecuador and Spain. The historian Alfonso Anda Aguirre (e.g., 1980, 1993) has focused on the province of Loja, and has published some documents that touch on Saraguro and the other natives of the province. Hernán Gallardo (1970) has produced a detailed synthesis on the aboriginal inhabitants of Loja, but seems to have relied

¹ These are two versions of the same article, the 1987 version being in French, the 1989 version in Spanish. Text-wise they are essentially identical, but they differ somewhat in their illustrations. In citations, I will refer to the Spanish version, except in the case where there is an illustration cited that only appears in the French version.

heavily and rather uncritically on a number of dubious ethnohistorical, historical, and archaeological sources, significantly reducing the value of his volume. In contrast, the *Historia de Loja y su Provincia* produced by Pio Jaramillo Alvarado (1982 [1955]) is a much better synthesis of the archaeological and ethnohistorical data known at the time of the first edition, but Jaramillo concentrated on the more familiar sources rather than bringing to light any of the more obscure documents.

I have drawn much from the above works, but where possible, I have utilized published versions of the discussed documents, including the original publication of the Relaciones Geográficas de Indias compiled by Marcos Jiménez de la Espada (1897), parts of which are frequently quoted in reference to the province of Loja. I have also consulted published versions of the works of the major chroniclers, such as Pedro Cieza de León and Miguel Cabello Balboa. While spending time in archives may eventually be fruitful in revealing more detailed information on the issues addressed here, it was outside the scope of the fieldwork for this project.

GEOGRAPHICAL DESIGNATIONS OF SARAGURO

At the time of the Spanish conquest, Saraguro seems to have been located within the greater province of the Paltas or "los Paltas," which roughly corresponded to the highland region administered by the Spanish town of Loja. The area within the domain of Loja was larger than the present province of Loja, as it also included most of what today are the provinces of El Oro and Zamora Chinchipe. Within that province of the Paltas, the ethnohistorical records mention a number of territories, such as Calvas, Chaparra, and Garrochamba, which were also referred to as *provincias*. The ambiguous use of the word *provincia* and other territorial designations can lead to some confusion as to the exact area being discussed, and the
lack of geographical descriptions and the imprecision of measures of distance make it hard to discern exactly where those regions were situated. The geography is puzzling, especially in the early Spanish period, where many towns, provinces and regions have more than one name, or have combined names, that may have originated from indigenous, Inca, or Spanish sources. The reductions of native populations into concentrated settlements, the movement of towns to new locations, the abandonment of settlements with declining populations of natives, and the application of certain common places names to multiple locales all compound the problem. Add to that the uncertainty of the writers themselves, many unfamiliar with the regions and settlements they are describing, and the names become still more confused. For Saraguro, it is essential to address the issue of which names refer specifically to the region to be able to recognize and utilize documents that do not cite Saraguro by its modern name.

It seems Saraguro is consistently mentioned as pertaining to the province of the Paltas, but ethnohistorical references to the northern part of that territory indicate that the Saraguro area was also known as Chaparra, at least during the sixteenth century. Caillavet (1989:152-153, 175) has located the region or sub-province of Chaparra as reaching from the Las Juntas area, near where the Río San Lucas connects with the Río Santiago south of San Lucas, extending north from there to the town of Saraguro. She has attempted to distinguish the various ethnic groups that inhabited the province of Loja at the time of the Spanish conquest, and has identified the ethnic groups with the names of the sub-provinces. Her determinations may be roughly correct for most of the province, but based on the possible translations of the word, it does not seem likely that "Chaparra" was an actual ethnic designation. In Spanish, the name means "brush" or "scrub," and thus could have easily been an early

designation for an area that was covered in vegetation, as was likely around Saraguro when the Spaniards first arrived. The Quichua words "chapra" and "zhapra" have similar meanings to "chaparra," suggesting a borrowing from Spanish. Finally, the name Chaparra does not resemble any of the non-Quichua toponyms from Saraguro or elsewhere in the province of Loja, and thus is probably not of pre-Inca origin. If the name is derived from the Spanish word, then it is unlikely that a zone named for its vegetation actually corresponded to the name of an ethnic group.

However, it is still possible that the *boundaries* of the territory of Chaparra conformed to those of some sort of ethnic grouping, and in fact there are enough references to Chaparra to conclude it was more or less synonymous with the Saraguro region. The two place names almost never appear together in the same document, yet the descriptions indicate that they are located in the same area, that is, to the north of the city of Loja along the main Inca road, and bordering on the territory of the Cañaris to the north. There is one exception where Chaparra and Saraguro are listed as if they were separate entities, in a proclamation of the church authorities in Quito assigning a priest the responsibility for the instruction of the natives of these lands in 1564: "for the present I name and announce for the *doctrina* of the natives of Amboca and Caraguro (Saraguro) and Chaparra and Auca with all of their annexes" (Archivo del Convento de San Francisco, Quito [AF/Q] 1564, in Caillavet 1989:153, translation mine).² Here, "Saraguro" may have been referring to the town rather than the region, while "Chaparra" referred to the area surrounding it. In any event, there is no assurance that the church leaders in Quito were fully aware of the geography and

² Original text reads:

[&]quot;por la presente nombro y señalo para la dotrina de naturales de Amboca y Caraguro y Chaparra y Auca con todos sus anejos" (AF/Q 1564, in Caillavet 1989:153).

toponyms of the province of Loja, unless they had actually spent time there.

Over the years, the toponyms for settlements and regions became more consistent and more streamlined, and today, the name Chaparra has disappeared from the landscape. It would seem that this place name dropped out of usage by the seventeenth century, as the last reference to the name that I have seen is from a declaration granting an *encomienda* to one Diez de Guzmán, in Paita on July 10, 1584:

The members of the Real Audencia de Quito, and in the fulfillment of it [the Royal Order] have entrusted to me the encomiendas of Cañaribamba and Chaparra, and relinquishing the encomienda of Jauja and Cañaribamba, I was given the favor of the encomiendas of Juncal and of Tulcán in the district of Cuenca and Quito [Anda Aguirre 1980:173, translation mine].³

After that date, only Saraguro or other towns are mentioned by name in that part of the domain of the city of Loja. The name of Saraguro itself, though of unclear origin and meaning (J. Belote and L. Belote 1994b:27-28), appeared in documents as early as 1540, and though many permutations of its spelling have been used, the name has obviously persisted to the present.

INCA CONQUEST OF SARAGURO AND THE SOUTHERN HIGHLANDS OF ECUADOR

Though they usually furnish few details, many of the major chronicles, as well as other sources, mention the Inca conquest of the Southern Highlands of Ecuador.

³ Original text reads:

[&]quot;Los señores de la Real Audencia de Quito, y en cumplimiento della (la Cédula Real) se me encomendaron los repartimientos de Cañaribamba y Chaparra, y haciendo dejación de la Encomienda de Jauja y Cañaribamba, se me dió merced del repartimiento de Juncal y de Tulcán en el distrito de Cuenca y Quito" (Anda Aguirre 1980:173).

Perhaps the earliest major account comes from Juan de Betanzos, (1987 [1551]:125), who briefly describes the Inca armies conquering the people living in the highlands north from Cajamarca up to Cañaribamba. The armies were said to be under the command of Emperor Pachacuti's son, Yamque Yupanqui, along with another son, Topa Inca, who later succeeded Pachacuti.

Within a few years of the date of that account, the Spanish soldier Pedro de Cieza de León published his famous chronicle of Peru. Unlike many other authors, he had first-hand knowledge of the southern highlands of Ecuador, which he gained while passing between Cuenca and Loja sometime between July and September in the year 1547 on the way to join the battle against the rebellious Gonzalo Pizarro. Though he was not without fault in his works (Estrada Ycaza 1987), Cieza is considered one of the most reliable of the Spanish chroniclers (Rowe 1946:195). As to the Inca conquest of the southern highlands of Ecuador, Cieza agrees with Betanzos that Topa Inca was involved in the conquest of the region, during the reign of his father Pachacuti:

He entered into Bracamoros and returned fleeing, because this land of forest is bad land; in los Paltas and in Guancabamba, Caxas, Ayavaca and their regions he had much trouble in subjugating those nations, because they are bellicose and robust, and he warred with them more than five moons; finally, they asked for peace and it was given to them on the same conditions as elsewhere. And the peace was established that day and the next the province was filled with mitimaes and with a governor, without taking away the authority of the natives, and storehouses were made and they put in sustenance and whatever else they were ordered to put in, and the royal road was constructed with the posts that were required along all of it [Cieza de León 1985 [1553]:163, translation mine].⁴

⁴ Original text reads:

Por los Bracamoros entró e bolvió huyendo, porque es mala tierra aquella de montaña; en los Paltas y en Guancavanbo, Caxas, y Ayavaca y sus comarcas tuvo gran travajo en sojusgar aquellas naciones

In this passage, the Inca forces are said to have made a disastrous excursion into the Oriente of Bracamoros, which lies to the east of Loja, before coming to the territory of the Paltas. The Paltas were mentioned together with the provinces of Guancabamba, Caxas and Ayavaca, seemingly because they all offered resistance to conquest, and this suggests the possibility that they were allied in their defense against the invaders. These groups held out for five months, a respectable showing against the Inca forces. After they finally pleaded for peace, the region was quickly filled with *mitmaqkuna* and an Inca governor was installed, and the new rulers had the Inca road constructed, along with the "typical" Inca installations, presumably meaning *chasqui* stations, *tambos, collcas*, etc. This information on Inca consolidation of the region is not necessarily very revealing because Cieza was more or less applying a formulaic description of what the Incas did in most of their provinces. Furthermore, Cieza has precluded us from getting a focused idea of the Inca conquest and subsequent treatment of any of the individual provinces by lumping the Guancabambas, the Caxas, and the Ayavacas in with the Paltas.

In subsequent passages, Cieza (1985 [1553]) relates that Topa Inca encountered resistance from the Cañaris as well, though he goes into little detail other than that the Incas prevailed and had over fifteen thousand men and their women sent to Cuzco. However, he mentions that there are those who say this mass movement of Cañaris occurred in the time of Huayna Capac.

The next account that deals with the conquest of southern Ecuador comes

porque son velicosas y robustas y tuvo guerra con ellos más de çinco lunas; mas al fin ellos pidieron la paz y se le[s] dio con las condiçiones que a los demás. Y la paz se asentava oy y mañana estava la provinçia llena de mitimaes y con gobernador, sin quitar el señorío a los naturales; y se hazían depósitos y ponían en ellos mantenimientos y lo que más se mandava poner; y se hazía el real camino con las postas que avía de aver en todo él (Cieza de León 1985 [1553]:163).

from a 1569 text from Cuzco giving the testimony of several Inca nobles, who were descendants of the emperor Topa Inca and two of his brothers. This account outlines the conquests of Topa Inca and his armies in the four quarters of the empire. John Rowe (1985a) has published the document as known from a later copy, and has reconstructed much of it based on comparisons to the accounts of the same events as given by Miguel Cabello Balboa, Martín de Murúa, and Pedro Sarmiento de Gamboa. In the account of these "Incas Nietos" (Inca grandchildren), Topa Inca's conquest of the northern highlands of Peru and the southern highlands of Ecuador is described thusly:

- and likewise conquered the province of Caxamarca and Guamachuco and Chachapoyas and Guayacondos.

- and then the province of the Paltas and Pacasmayo and Chimo and the rest were left in peace.

- and then conquered the province of the Cañares and Quito capturing Piçar Capac and Cañar Capac and Chica Capac and the other kings that they had [Rowe 1985a:224, translation mine].⁵

Though this account is a list of conquered territories rather than a chronological ordering of events, the geographical ordering of conquests probably reflects to some extent the sequence in which they occurred. According to this record, Topa Inca had conquered the northernmost highland provinces of Peru (Cajamarca, Huamachuco, Chachapoyas, and Guayacondos), and then the province of the Paltas. The positioning of the conquest of the Chimú state after the Paltas and Pacasmayo suggest

⁵ Original text reads:

⁻ y assimesmo conquisto la prouinçia de caxamarca y guamachuco y chachapoyas y guayacondos.

⁻ y luego la prouinçia de [los] pal[tas y] pa[casmayo y] chimo y los demas le salieron de paz.

⁻ y luego conquisto la prouinçia de los cañares y quito prendiendo a piçar capac y a cañar capac y a chica capac y otros rreyes que tenian (Rowe 1985a:224, text in brackets added by Rowe).

that Topa Inca had diverted his attentions to the North Coast of Peru before reversing course and going back to the Ecuadorean highlands. There, he conquered the Cañari area and up north to Quito. If the listing of territories was strictly geographical, it would be expected that Chimú territory would be mentioned closer to Cajamarca, which was adjacent to the heartland of the Chimú, rather than after the Paltas, who lived farther to the north and east. It is conceivable that the Cañaris had put up enough resistance to Topa Inca and his forces that he decided to proceed elsewhere before returning to deal with them. Of course, the Chimú were not themselves an easy target, and were potentially the strongest rivals of the Incas. As they were said to have been protecting themselves along their southern and eastern flanks, an Inca advance from the north was probably not anticipated by the Chimú leaders, and may have been a strategic move on Topa Inca's part. Conquering Palta territory would have allowed for easy access to the coast along the Tumbez and other rivers, and from there south to Chimú territory.

This account varies from Cieza's in several points. First, there is no mention of the smaller provinces of Guancabamba, Caxas, and Ayavaca, which Cieza had lumped in with the Paltas, but of course, the Incas Nietos manuscript was much less detailed than Cieza's chronicle. If any sort of chronological ordering can be assumed from the record of the Incas Nietos, then their account also would differ from Cieza's in the actions of Topa Inca and his army *after* conquering Palta territory. Cieza gives the Cañaris as next on the hit list, in contrast to Pacasmayo and Chimú as listed by the Incas Nietos. It is hard to judge which scenario is the more likely, but the strategic use of the province of the Paltas as a staging area or protected border would have been directly affected by the direction of conquests.

Another chronicler whose account parallels that of the Incas Nietos is Pedro

Sarmiento de Gamboa, who relates in his Historia de los Incas from 1572:

At last, Topa Inga left from Cuzco, and from near the city started to go destroying...and [conquered] the province of the Paltas and the valleys of Pacasmayo and Chimo, which is now Truxillo, and which he devastated, with Chimo Cápac becoming his subject, and [conquered] the province of the Cañares. And those that had resisted him he destroyed totally. And the Cañares surrendered to him, although from fear, and he captured their leaders, named Písar Cápac and Cáñar Cápac and Chica Cápac, and he built an impregnable fort in Quinchicaxa [Sarmiento 1942 [1572]:119, translation mine].⁶

Again, there is no detail of the events related to conquering the province of the Paltas.

All we are given is when the province was conquered relative to the others, and here Sarmiento lists the conquests in the same order as the Incas Nietos, with Topa Inca heading to the coast of Peru before addressing the issue of the Cañaris. As to those northern neighbors of the Paltas, Sarmiento is ambiguous as to whether they resisted at all, or capitulated from the beginning.

Our most detailed account of the conquest of the Paltas comes from Miguel

Cabello Balboa, another of the best ethnohistoric sources (Rowe 1946:196). In his

Miscelánea Antártica from 1586, he states:

...and they returned with many reports and prisoners to Cajamarca, from where Topa-Inca, with his people alongside, took the road to Guambos, and subdued and conquered Llaucanes, and Chotas and Cutervos, and Guambos, from there he went to Guanca-bamba, and encountered with them some resistance of little import, and left them subject to his command, went on to Cusibamba and conquered the Paltas, with the death of many who had fortified themselves in

⁶ Original text reads:

Finalmente Topa Inga salió del Cuzco, y desde cerca de la ciudad empezó a ir destrozando...y la provincia de los Paltas y los valles de Pacasmayo y Chimo, que es agora Truxillo, a la cual destruyó con ser Chimo Cápac su súbdito, y la provincia de los Cañares. Y a los que se le resistían los asolaba totalmente. Y los Cañares con dársele, aunque de miedo, les prendió sus cinches, nombrados Písar Cápac y Cáñar Cápac y Chica Cápac, y edificó una fortaleza inexpugnable en Quinchicaxa (Sarmiento 1942 [1572]:119).

the rugged lands of Zaraguro, there the Cañares came to him to give their obedience without daring to test their skill against that conquering nation; they arrived at Cañaribamba and Tumibamba, where the Cañares had begun to rise in revolt, because they are a dreaming people and of little loyalty; the Inca carried out remarkable punishments, and captured Pisar Capac, Cañar Capac, and Chica Capac, chiefs and lords of that nation [Cabello Balboa 1945 [1586]:305, translation mine].⁷

Once again, Topa Inca is the one credited with conquering the province of the Paltas, after defeating other groups in the northern Andes of Peru. Cabello Balboa actually mentions the territory of Guancabamba, but does not lump it in with the Paltas, as Cieza did. Saraguro figures prominently in the defeat of the Paltas as a rugged place where they had fortified themselves against the Incas, and where many of them died. Cabello Balboa also implies that Saraguro was the place where the Cañari leaders came to submit to the Incas, so not only was it the setting of warfare but also of diplomacy. In this account, the Cañaris soon became unruly and had to be disciplined. Also, according to Cabello Balboa, the provinces on the North Coast of Peru had been conquered before Topa Inca came to Palta territory. Many parts of Cabello Balboa's account of Topa Inca's conquests parallel that of the Incas Nietos, as Rowe (1985a:201) points out, but the divergence from the earlier account, especially the details given of the Palta resistance, probably stem from Cabello Balboa's personal experience in Ecuador.

⁷ Original text reads:

^{...}y se volvieron con muchas relaciones y prisioneros a Cajamarca, de donde Topa-Inca, con su gente junta, tomó el camino para los Guambos, y allanó y sujetó Llaucanes, y Chotas y Cutervos, y Guambos, de allí fue a Guanca-bamba, y tuvo algunos impedimentos de poca cuenta con ellos, y los dejó sujetos a su obediencia, pasó a Cusibamba y venció a los Paltas, con meurte de muchos que se le hicieron feurtes en las asperezas de Zaraguro, allí le vinieron los Cañares a dar la obediencia, sin osar probar la mano con aquella nación vencedora, llegaron a Cañaribamba y a Tumibamba, donde por algunas revoluciones que entre los Cañares se comenzaban a levantar, por ser gentes noveleras y de poca constancia, hizo notables castigos el Inga, y prendió a Pisar-Capac, y a Cañar-Capac y a Chica-Capac, Caciques y señores de aquella nación (Cabello Balboa 1945 [1586]:305).

The conquest of the Palta region is also credited to Topa Inca by Fray Martín de Murúa in his account from the early seventeenth century:

Tupa Ynga Yupanqui and his brothers left from Cuzco with a large army from different nations and began their conquest of the province of the quichuas...and to the Paltas and to Pasmayo and to Chimo, and then to the province of the Cañares. And the Cañares, hearing of the fame of Tupa Inga Yupanqui and the punishments that he meted out to those who did not give their obedience, fearful of their destruction went out to receive and obey him...[Murúa 1962 [1605]:51, translation mine].⁸

Murúa's recounting corresponds closely with that of the Incas Nietos, much as does Sarmiento's chronicle (Rowe 1985a:201). As in that account, the province of the Paltas was said to have been conquered immediately before Topa Inca turned his army to the coast to conquer the Chimú kingdom. Next, the Cañaris came to peacefully submit (at first) to Inca authority. This sequence of events also corresponds with the version from Sarmiento (1942 [1572]), and somewhat to that of Cabello Balboa (1945 [1586]). Though not mentioned by name, it might be inferred that the Cañaris came south to the nearest place controlled by the Incas to submit to Topa Inca; this would have been the Saraguro area.

To present a dissenting view of Topa Inca's annexation of the southern highlands of Ecuador, we have Garcilaso de la Vega, El Inca, who discusses the conquest of the Paltas and the Cañaris in his *Royal Commentaries of the Incas* from 1609:

⁸ Original text reads:

Salieron del Cuzco Tupa Ynga Yupanqui y sus hermanos con vn numeroso exército de diferentes naciones, y empeçaron su conquista de la provincia de los quichuas...a los Paltas y a Pasmayo y a Chimo, y luego la prounicia de los Cañares. Y los Cañares oyendo la fama de Tupa Inga Yupanqui y los castigos que hacía en quien no le daua luego la obediencia temerosos de su destruyción les salieron a reciuir y le obedeçieron...(Murúa 1962 [1605]:51).

Túpac Inca Yupanqui went to the province of Cañari, and on the way conquered the intervening region called Palta, whence the rich and succulent fruit called *palta* was brought to Cuzco and to the hot valleys. The Inca won the province very easily, by means of kindness and flattery rather than by force of arms. The people are warlike, yet princes can achieve much by clemency...The Inca went on, leaving officials to attend to the spiritual and temporal administration of the province. On reaching the frontier of the Cañaris, he sent them the usual summons to surrender or resort to arms. The Cañaris held various views, but they at last agreed to obey the Inca and accept him as their lord, realizing that they could not offer resistance to him on account of their quarrels and differences. They came forward with great rejoicing to present their obedience to the Inca; and their example was followed by all the other curacas who readily gave in. The Inca received them with great affability and granted them favors: he had them provided with garments, of which they stood in great need, and ordered them to be instructed in the worship of the Sun and political system of the Incas [Garcilaso de la Vega 1966 [1609]:485-486].

Considering Garcilaso's propensity for fabrication (Rowe 1946:196),

combined with the contrary accounts of the other chroniclers, there is little reason to put much faith in his scenario of the Paltas being enticed into the Inca fold through kind words and deeds as opposed to offering resistance. However, in earlier passages where Garcilaso describes the Inca conquest of the provinces of Cassa, Ayahuaca, and Callua (Garcilaso de la Vega 1966 [1609]:482-483), the events he relates are very similar to the accounts given by Cieza de León and Cabello Balboa for the conquest of the Palta region. As was noted above, Cieza had lumped together several territories, including Caxas and Ayavaca, which undoubtedly correspond to the lands of Cassa and Ayahuaca of Garcilaso. Garcilaso's information of the Inca conquest of those provinces was probably conflated with the conquest of the Palta S. Furthermore, the zone of Calvas (or Callua) is one of the sub-areas of the Palta domain as identified by Caillavet (1989:157, 175), and thus Garcilaso was dealing with the subjugation of the Paltas at least to some extent. The relevant passages are as follows:

It is not known how many years passed after the conquest of the great province of Huancapampa before the Incas went on to conquer three other provinces, which also contain many different tribes, though, unlike the foregoing peoples, these lived in a civilized fashion, having villages and strongholds, and a system of government, and met together from time to time to discuss matters of advantage to them all. They did not recognize any lord, but by common consent elected governors for times of peace and captains for their wars, respecting and obeying them with great veneration while they exercised these offices. These three provinces, which were the principal ones, were called Cassa, Ayahuaca, and Callua. As soon as the Inca reached their confines he sent to summon the natives to receive him as their lord or prepare for war. They replied that they were prepared to die in defence of their liberty, for they had never had any lord and did not desire one. At this, war flared up and was bitterly contested by both parties, for the offers made by the Inca with peace and clemency were of no avail. To this the Indians replied that they wanted no peace from anyone who claimed to make them his vassals and deprive them of their present freedom, that they begged him to leave them free and go away in peace, since this was the greatest favor he could confer on them. The provinces rallied to one another's assistance in their hour of need with great promptness; they fought like men and killed many of the Inca's forces, which exceeded eight thousand men. On seeing this the Inca pressed them hard with fire and bloodshed using all the rigors of war; but the enemy suffered all this with great courage in order to preserve their liberty, and when some of their strongholds were reduced, those who escaped withdrew to others, and thence to others, and others, forsaking their own hearths and lands and heedless of their wives and children, for they preferred to die rather than see themselves subjected to an alien.

The Incas gradually gained ground from them until they were driven to the remotest part of their territory, where they fortified themselves and prepared to die resisting. There they were so tightly pressed that they were reduced to the last extremity, though they remained ever firm in not submitting to the Inca. When this was seen by some of their more prudent captains, they realized that they would all perish without cause while other tribes that had been as free as they had surrendered to the Inca, only to increase their possessions instead of being deprived of them. All the captains therefore discussed this among themselves and decided to submit to the Inca and give in, which was done, though not without a disturbance on the part of the soldiers, some of whom mutinied: but seeing the example of the captains and heeding the summons addressed to them to obey, they all surrendered.

Túpac Inca Yupanqui received them kindly and with regrets that they should have allowed themselves to reach a state of such extreme need. He gave instructions that they should be cared for as if they were his own children, and since many had perished in the war and left the land seriously underpopulated, he ordered colonists to be brought from other provinces to settle and till the area. Having provided everything necessary for its administration and for the introduction of their idolatry, he returned to Cuzco much wearied and strained by the war...[Garcilaso de la Vega 1966 [1609]:482-483].

The banding together of different groups in the region corresponds with Cieza de León's account, as does the depiction of the length of the conflict and the bringing in of *mitmaqkuna*, while the characterization of the resisting warriors fortifying themselves in remote territory mirrors Cabello Balboa's description of the Paltas making a stand in the rugged lands of Saraguro. In light of these comparisons, and the fact that this relation included a group that has been identified as belonging in the Palta territory, it seems reasonable to conclude that this passage of Garcilaso's describes events that took place in the Loja region, most likely including Saraguro. Furthermore, what little Garcilaso relates specifically about the conquest of the Paltas is probably a misrepresentation generated by the confusing grouping of individual ethnic or political groups in that region of the Andes. Garcilaso hints at the confused cultural picture of that area by describing this large region as three provinces that were made up of many separate tribes, which agrees with Caillavet's (1989:171) assessment that the Palta territory was made up of several different independent groups.

Though Garcilaso's account for the Palta area may be confused, his portrayal of Cañari acquiescence to Inca rule does agree with the other accounts. He depicts the conquest of the Chimú Empire as occurring earlier than Topa Inca's entrance into Ecuador, in agreement with Cabello Balboa's sequence of events.

From the preceding ethnohistorical accounts, there is little doubt that the Inca who conquered the Saraguro region was Topa Inca Yupanqui, during the reign of his

father Pachacuti. The only significant contradiction to that scenario comes from the chronicler Fernando Montesinos, in whose account: "Huira Cocha left from Cuzco with more than thirty thousand soldiers; he arrived without contradiction until the Paltas" (Montesinos 1882 [1642]:137-138, translation mine).⁹ In light of what is known about the Inca conquests from the more reliable sources, there is little reason to give credit to Montesinos' assertion that it was Viracocha instead of Topa Inca who conquered the Paltas.

Other details about the acquisition of the territory are spotty or contradictory. The question of whether the province of the Paltas was annexed through force or diplomacy is debatable, but most sources relate that it was through battle, and the most detailed report holds that the Paltas had fortified themselves in the rugged territory of Saraguro. Caillavet interprets the locations of Inca installations noted in the ethnohistory as indicating that the territory of the Paltas was surrounded and attacked from the west, south and north (Caillavet 1989:165), but such a scenario does not stand up to close scrutiny. According to all accounts, the Paltas were the first group conquered in Ecuador, and the Cañaris were conquered later, and thus the Incas would have had no territorial base from the west if Topa Inca had conquered the Chimú and others on the north coast of Peru prior to heading to Ecuador.

But accounts vary on the sequence of events. Quite possibly, after the conquest of the Paltas, the Inca army went to the north coast of Peru via the province of Loja and conquered Pacasmayo and the Chimú empire from the North. Then, at

⁹ Original text reads:

Salió del Cuzco Huira Cocha con más de treinta mil soldados; llegó sin contradicción alguna hasta los Paltas...(Montesinos 1882 [1642]:137-138).

some point after Topa Inca conquered the Paltas, the Cañaris submitted to Inca control, and may have come to Saraguro to do so before suffering military intervention. If that is true, then the Cañaris may have harbored ill-feelings toward Saraguro as a symbol of defeat, reminiscent of the feelings Germans felt toward Versailles after World War I. This may have been another ingredient in the animosities expressed between the Saraguros and the Cañaris after the Spanish conquest, as detailed below.

In addition to the part it played in the Cañari submission, the Palta area may have served temporarily as a place where leaders of other native groups came to yield to the Inca. Cieza tells of a group of people from the coastal territory near Puerto Viejo who came up to submit to Topa Inca: "And many of the chief people went to the province of the Paltas to bow to him (Topa Inca); and he received them kindly and with much love, giving to some of them that came to see him rich pieces of wool made in Cuzco" (Cieza de León 1984 [1553]:219, translation mine).¹⁰

Inca Administration of Saraguro

The ethnohistorical record of the Inca occupation of Saraguro is nearly as meager as the accounts of the conquest. But concerning the issue of how the Incas organized and governed the area, there are more regional documents that provide

¹⁰ Original text reads:

^{...}en tiempo del gran Topainga Yupangue, su padre, vinieron ciertos capitanes suyos con alguna copia de gente, sacada de las guarniciones ordinarias que estaban en muchas provincias del reino, y con mañas y maneras que tuvieron los atrajeron a la amistad y servicio de Topainga Yupangue. Y muchos de los principales fueron con presentes a la provincia de los Paltas a le hacer reverencia; y él los recibió benignamente y con mucho amor, dando a algunos de los que los vinieron a ver piezas ricas de lana hechas en el Cuzco (Cieza de León 1984 [1553]:219).

more detail, and are somewhat less contradictory than the general chronicles.

Juan de Salinas Loyola's description of native governmental organization of the province suggests that the Incas implemented their system of decimal administration within the Palta region:

Of the arrangement of the government, a settlement that had one thousand Indians had its cacique, whom they respected and recognized as lord; and this one had ten chiefs, each of whom commanded one hundred Indians; and each one of these chiefs of one hundred Indians had ten or five chiefs, having distributed to each one ten or twenty Indians, of whom they were in charge; and by this arrangement they were governed and ruled. The cacique and lord commanded the chiefs in what they had to do, and those chiefs distributed evenly among the Indians that they commanded assignments of work as well as tribute; in a way such that the work and the contribution was equal, without anyone being wronged; and in this arrangement they remain and keep and it is the best that they could give to them [Salinas Loyola 1897 [1571 or 1572]:217, translation mine].¹¹

This system was to be used throughout the empire to organize people through local leaders in a way that mirrored the organization of the other provinces, while allowing the even distribution of labor obligations within and between the provinces (Julien 1988). Though we might assume that basic elements of the system were implemented everywhere in the same manner, many of the elements that would have varied by province were not described by Salinas. For example, he did not mention the total size of the largest administrative unit, where the borders were drawn, who the highest

¹¹ Original text reads:

La orden del gobierno, un pueblo que tenia mill indios tenian su cacique á quien respetaban y conocian por señor; y este tenia diez principales que cada uno mandaba cient indios; y cada uno de los principales dichos de cient indios tenia diez principalejos ó cinco, repartidos á diez indios ó veinte cada uno, de que tenian cuenta; y por esta orden se gobernaban y reguian. El cacique y señor mandaba á los principales lo que habian de hacer, así en cosas de trabajo como en juntar tributos, los cuales principales lo repartian á rata por cantidad entre los indios que mandaba; de manera que el trabajo y contribucion era igual, sin que rescibiesen agravio; y en esta orden estan y guardan y es la mejor que se les puede dar (Salinas Loyola 1897 [1571 or 1572]:217).

level administrators were, whether they were Inca or local, where they were stationed, what their labor obligations were, etc.

One detail of the Inca administrative organization of the southern highlands of Ecuador is suggested by a Spanish document from 1540 that classifies Saraguro as part of the territory of Hanan (upper) Cañar:

...*in the province of the Cañares of Hurinsaya* (the lower division of the province), the cacique named Xalabaxon, lord of the Guaya, and another cacique named Don Pedro, lord of the town called Cañare, and another cacique Peraysa lord of the town of Molloturo, and in *the province of Hanansaya* (the upper division of the province) *the cacique Xibaçera lord of the town Çaracoro*, and another cacique named Chuquimarca lord of the town Xalocipa, and another cacique Tenejuenlla lord of the town Syqueçapa, and another cacique Quiranyçaca lord of the town Laguan, and another cacique Lliuquenlla lord of the town Payguro, and another cacique Duma lord of the town Cequeceque [Archivo General de Indias, Seville [AGI/S] 1540, in Caillavet 1989:166, translation mine, emphasis from Caillavet].¹²

Here, "Çaracoro" is yet another variation on the spelling of Saraguro, which is not surprising given the inconsistency of spelling of native words in these early Spanish documents, and the changes in the pronunciation of both Spanish and Quichua over time. This also may be the earliest mention of Saraguro by name. The suffix "guro" in the place name Payguro above, and its variants, are characteristic of the modern Saraguro region, as demonstrated by the Belotes (J. Belote and L. Belote 1994b:27), and its appearance twice in the above list indicates that the defined territory of Hanan

¹² Original text reads:

^{...}en la provincia de los Cañares de Hurinsaya el cacique se dize Xalabaxon señor del pueblo Guaya e otro cacique que se dize Don Pedro señor del pueblo que se llama Cañare e otro cacique que se llama Peraysa señor del pueblo Molloturo y en *la provincia de Hanansaya el cacique Xibaçera señor del pueblo Çaracoro* e otro cacique que se llama Chuquimarca señor del pueblo Xalocipa e otro cacique Tenejuenlla señor del pueblo Syqueçapa e otro cacique Quiranyçaca señor del pueblo Laguan e otro cacique Lliuquenlla señor del pueblo Payguro e otro cacique Duma señor del pueblo Cequeceque (Archivo General de Indias 1540, in Caillavet 1989:166, emphasis from Caillavet).

Cañar included at least part of the Saraguro cultural area. The division of Cañari territory into *hanan* and *hurin* halves is typical of Inca organization, as noted in Cuzco and elsewhere. The partitioning of the whole of Cañari territory into two halves using the Inca terms *hanansaya* and *hurinsaya* undoubtedly reflects the imposition of Inca organization.

The inclusion of part or all of Saraguro territory into Hanan Cañar was probably a direct result of the establishment of Inca decimal administration. Cañari territory may have contained more than the ten thousands tributaries that would have made an ideal provincial unit, and this led to the split into *hanan* and *hurin* sections. Yet, to bring those two halves up to the desired number of inhabitants, contiguous non-Cañari territories may have been re-defined and tacked on, which was a common Inca technique for making the numbers come out right (Julien 1988:171). Therefore Saraguro, which was considered in some accounts territory of the Paltas, became part of Hanan Cañar, probably allowing that territorial unit to reach the level of an *huno*, or unit of ten thousand tribute payers. In fact, the province of Leoquina or Pacaybamba, to which Saraguro would have been annexed, was said to have "been a province of many Indians, of more than ten thousand" (Arias Dávila 1897 [1582]:178, translation mine),¹³ and the mention of this number most likely reflects the Inca accounting of population as related to decimal administration.

The imposition of the decimal administration system in Cañari and Palta territory show that those provinces were thoroughly integrated into the imperial system, yet we are still unaware of how many levels of control were left in local

¹³ Original text reads:

[&]quot;Ha sido provincia de muchos indios, de más de diez mil..." (Arias Dávila 1897 [1582]:178).

hands, and where the Inca governors came into play. Cieza's quote that the province was given "a governor, without taking away the authority of the natives" (Cieza de León 1985:163, translation mine)¹⁴ suggests that the native leaders were largely left in control, with only an Inca governor placed at the head of the province. But no other documents corroborate Cieza's statement, and as previously mentioned, this may have been simply Cieza's formula statement to describe the imposition of Inca control.

Inca Sites

There is not much mention made in the ethnohistory of the numbers, names, and types of sites and installations that the Incas constructed around Saraguro. Cieza de León's description is probably the most detailed we have, and even that is lean. He gets to the heart of the matter of the province of the Paltas in Chapter LVII of his *Crónica del Perú*, as he recounts his travels south from Cuenca:

Leaving Tumebamba along the great road that leads to the city of Cuzco, one goes across all of the province of the Cañares, until arriving at Cañaribamba, and at other lodgings that are farther ahead...Beyond the limits of these Cañare Indians, one reaches the province of the Paltas. In that province are some lodgings that are called in these times Las Piedras because there were seen there many and very fine stones. The Inga kings in the time of their reign had ordered their officials or delegates to build these tambos because they considered this province of the Paltas important. They were large and elegant, and were very skillfully and finely made. The stonework of which they were made is situated in the headwaters of the Río Tumbez, and joined with many standard storehouses, where they would put the tributes and contributions that the natives were obligated to give to their king and master, and to their governors in his name.

¹⁴ See Footnote 4 for complete original text.

To the west of these lodgings lies the city of Puerto Viejo to the east lie the provinces of the Bracamoros...[Cieza de León 1984 [1553]:179, translation mine].¹⁵

Continuing from Las Piedras on toward the city of Loja:

From the province of the Cañares to the city of Loja (which is also known as la Çarça) the distance is put at seventeen leagues; the whole way is difficult and there are several bogs. Between is the home of the Paltas, as I have said.

After leaving the lodging of las Piedras begins a forest that is not very large, although very cold, which lasts a little more than ten leagues, at the end of which is another lodging, which is named Tambo Blanco. From there the royal road goes to overlook the river called Catamayo. On the right hand side, near this same river is situated the city of Loja, which was founded by Captain Alonso de Mercadillo in the name of his majesty, the year of our Lord 1546 [Cieza de León 1984 [1553]:180, translation mine].¹⁶

Hazia el Poniente destos apoxentos está la ciudad de Puerto viejo al Oriente están las prouincias de los Bracamoros...(Cieza de León 1984 [1553]:179).

¹⁶ Original text reads:

¹⁵ The last few sentences of the first paragraph do not make total sense, therefore the translation is a rough approximation. The original text reads:

Saliendo de Thomebamba por el gran camino hazia la ciudad del Cuzco, se va por toda la prouincia de Los Cañares, hasta llegar a Cañaribamba, y a otros aposentos que están más adelante...Estando fuera de los términos destos Indios Cañares, se allega a la prouincia de los Paltas: en la qual ay vnos aposentos que se nombran en este tiempo de las piedras: porque allí se vieron muchas y muy primas: que los reyes Ingas en el tiempo de su reynado auían mandado a sus mayordomos o delegados: por tener por importante esta prouincia de los Paltas, se hiziessen esos tambos: los quales fueron grandes y galanos: y labrados política y muy primamente. La cantería con que estauan hechos y assentados en el nacimiento del río de Túmbez: y junto a ellos muchos depósitos ordinarios, donde echauan los tributos y contribuciones que los naturales eran obligados a dar a su rey y señor, y a sus gouernadores en su nombre.

De la prouincia de los Cañares a la ciudad de Loxa (que es la que también nombran la Çarça) ponen diez y siete leguas: el camino, todo fragoso y con algunos cenagales. Está entre medias la población de los Paltas, como tengo dicho.

Luego que parten del aposento de las piedras: comiença vna montaña no muy grande, aunque muy fría, que dura poco más de diez leguas: al fin de la qual está otro aposento que tiene por nombre Tambo blanco. De donde el camino real va a dar al río llamado Catamayo. A la mano diestra cerca deste mismo río está asentada la ciudad de Loxa: la cual fundó el capitán Alonso de Mercadillo en nombre de su Magestad año del Señor de mill y quinientos y quarenta y seys años (Cieza de León 1984 [1553]:180).

First, Cieza described leaving Tomebamba and entering Palta territory, as he was traveling south along the Inca road that leads to Cuzco. He was in Cañari territory until at least the village of Cañaribamba, and presumably somewhere south of there began the province of the Paltas. The first Inca site he mentions within that province is that of Las Piedras, which was so designated because of its fancy cut stones, and according to Cieza, it was a *tambo* that was constructed because the province of the Paltas was considered important to the Incas. Apparently, there were also many *collcas* associated with this site.

If Cieza was traveling along the most direct route south between Cuenca and Loja, then he would have presumably traveled through the Saraguro area, and thus the site of Las Piedras would either be located near Saraguro or somewhere to the north of it. However, this presumed itinerary presents several inconsistencies. First of all, Cieza said that Las Piedras is located at the headwaters of the Río Tumbez, but any site near or north of Saraguro would be located within the Río Paquishapa drainage, or near another branch of the Río Jubones. The headwaters of the Río Tumbez are significantly farther to the west. Secondly, the ten league distance from Las Piedras to Tambo Blanco, a site whose location is still known, would put Las Piedras clearly within Cañari territory, if measuring north along the main Inca road. Third, Cieza never mentions Saraguro by name in relation to Las Piedras or elsewhere in his chronicle, even though the toponym was known as early as 1540 (see above).

These inconsistencies point to two possibilities. One is that Cieza de León did not travel on the main Inca highway through Saraguro, and Las Piedras is located elsewhere on whatever alternate route he traveled. The other is that Cieza simultaneously made mistakes of distance and geography about a region of which he had first-hand knowledge. The first implies a significant detour, which is possible,

considering the reported hostility of the natives of the Saraguro area toward the Spaniards, expressed through ambushes along the highway (as described later in this chapter). Cieza could have avoided such problematic encounters by taking advantage of the complexity of the Inca road system in the province, which is said to have included more than a single north-south route through the highlands. The observations of Caldas (1912:201) and Uhle (1923:4), as discussed in the next chapter, indicate the presence of three north-south roads between Loja and Cuenca, one of which began in the region of Tumbez and went north; Cieza could have taken this leg from Cañaribamba to Las Piedras. There may have been a connector road going from that route, probably leading directly from Las Piedras to Tambo Blanco, joining there with the central north-south highway. This route would have matched Cieza's description of the zone between the two sites, with a ten league stretch of cold forest in between.

However, the second possibility, that Cieza took the direct route south but made mistakes in reporting geography and distance, cannot be discarded. He did explicitly state that he was travelling "along the great road that leads to the city of Cuzco," and never mentioned taking alternate routes. Furthermore, the mistake of placing Saraguro near the headwaters of the Río Tumbez recurs in at least some maps through the mid-nineteenth century (e.g., Colton 1856:Number 56); for Cieza to make the same mistake in the sixteenth century would not be remarkable. Finally, the distance of ten leagues given by Cieza is more likely a reflection of travel time rather than a precise distance, and given the rough terrain of the region, travel for Spaniards on horseback could have been slowed considerably.

As for the second site in Palta territory, Tambo Blanco, Cieza does nothing more than mention it by name. From that spot, it is important to note that the road did

not go simply straight south from Tambo Blanco to the location of modern-day Loja. At that time, the town of Loja was located farther to the west, along the Río Catamayo, which flows to the Pacific; it was later re-founded at its present location along the Río Zamora, which drains to the Amazon Basin. When Cieza passed through, Loja had just been founded along the Río Catamayo, and it was not until the next year that the town was moved to its present location. Thus, Cieza's route heading from Tambo Blanco and following the Río Catamayo to Loja would make sense then, but not now.

As for other descriptions of Inca sites, Felipe Guaman Poma de Ayala, the popular source of illustrations of Inca life and culture, unfortunately never discusses Saraguro. But in his list of *tambos* and other major Inca sites, Guaman Poma lists five sites between the cities of Cuenca and Loja, and at least one of these sites should relate to the Saraguro region. But his information cannot be accepted as accurately representing the Inca installations; first of all, he was writing several decades after the Spanish conquest, and secondly, it is recognized that his list of Inca *tambos* "is somewhat confused since it reverses and omits *tampu*" (Hyslop 1984:22). Nevertheless, Guaman Poma provides some information that is not found elsewhere, so a review of his list is useful. From north to south, the sites are:

quenca	ciudad y mezon rreal y casas de guayna capac ynga
tume	pueblo tanbo rreal
caza cuno	tanbo rreal
auna	tanbo rreal
conchanuma	tanbillo a donde esta las piedras que mando llevar guayna capac ynga al cuzco
cocha	tanbo rreal

loxa

ciudad y mezon rreal [Guaman Poma 1936 [1615]:1086/1096]

Quenca, of course, is the same as the modern city of Cuenca, which was the location of the major Inca site of Tomebamba. The next site, Tume, is designated by Guaman Poma with a house symbol, which signaled a tambo and town, but apparently Guaman Poma had made a mistake, as Tume ("knife" in Quichua) probably signified Tomebamba ("plain of the knife" in Quichua), and his lack of firsthand knowledge of the area led him to list the site twice (Hyslop 1984:22).

Caza Cuno is depicted by a plain open circle, indicating a tambo without a town. The name Casa Cuno may be related to the Quichua verb *casana*, which means "to freeze," and one conjugation, *casacuna*, means "to be freezing," and it is conceivable that the cold *páramo* conditions prevalent in some parts between Saraguro and Cuenca would lead to such a name. There are other ethnohistorical references to a site by this name (Idrovo 2000), which is apparently located to the north of Saraguro.

The next site, Auna, is also indicated with the circle of the tambo without a town. The word "auna" may be derived from the Spanish verb "aunar," which means "to join," and this could correspond to the Las Juntas area south of San Lucas, where the Río San Lucas joins the Río Santiago. Las Juntas, which itself means "the junctions," is not too far from where Tambo Blanco is located, but Las Juntas is distant enough that there could reasonably be another *tambo* located there. If Guaman Poma's Auna is Tambo Blanco, and his Caza Cuno is Saraguro, then the order he listed them in would have been correct. Otherwise, I have found no other possible meanings of the place name, nor other mentions of the site in other records. However, the Auca ("warrior" in Quichua) listed in the Quito church document from

1564 (see above) may be related to Auna, though no other details about this Auca are available.

Conchanuma is represented by a cross, which stands for a small *tambo*, and Guaman Poma notes that this is where the stones are that Guayna Capac had ordered carried to Cuzco. This may refer to some sacred stones or possibly worked stones, that were located in this area and meant to be taken to Cuzco, though no other details are provided, and one might assume the stones were still there in Guaman Poma's day. It is possible that Guaman Poma was referring to the Las Piedras of Cieza, which was named for its finely dressed cut stones. The name "Conchanuma" may be related to the Spanish "concha," which means "shell," or be derived from the Quichua word "cocha," meaning "lake." The suffix *-numa* is common in toponyms in central and southern Loja province, though its meaning is unknown (J. Belote and L. Belote 1994b:27, L. Belote and J. Belote, editors, 1994:12). There are no other mentions in the ethnohistory of a site with this name, though farther down in Guaman Poma's list is a site named Conchanama.

Cocha is the name for the last *tambo* listed before Loja, and it is noted as another *tambo* without a town. As with Auna and Conchanuma, there are no known settlements or Inca sites in the Saraguro area that match this name, and because the word "cocha" is quite common in Quichua toponyms it would be hard to match a location with that name to Guaman Poma's site. Finally, Loxa is the city of Loja as situated in its second location along the Río Zamora.

Whether these place names match up with any remains of Inca sites remains to be seen, though it is quite possible that one or two of these correspond to sites in the Saraguro region. Many sites may have been omitted by Guaman Poma, especially if they had been abandoned before his time, and considering the distance between

Cuenca and Loja, there undoubtedly were more sites than this in the area. It is unusual that the best known site near Saraguro, Tambo Blanco, which was mentioned by Cieza, was not listed by Guaman Poma. But as the town of Saraguro was utilized by the Spaniards as a *tambo*, they may have abandoned the use of the Inca *tambos* in the immediate vicinity by Guaman Poma's day.

As a final source that mentions Inca activities in the Saraguro area before the arrival of the Spaniards, we have Fray Martín de Murúa's writings from around 1590-1605:

They say that the great Huaina Capac ordered made in this great city of Cusco two houses of very well made stonework, and having been made, he had them taken apart, stone by stone, and he ordered that they rebuild them in Quito; and toward this end they carried all of the stones, and arriving with them close to Quito, in the land of the Cañares, in a settlement called Saraguru, a lightning bolt struck and broke the principal stone of the building, which stone was to lay over the main doorway, and the Inga being informed of this by them, he feared it and took it for a bad omen, and ordered that they leave there all of the said stones, where they lie today in the said location, close to the royal road [Murúa 1946 [1605]:196, translation mine].¹⁷

This is one of the very few ethnohistorical accounts, along with that of Cabello Balboa, above, that mention Inca activities in the area while actually mentioning Saraguro by name. Though Murúa's information is in the form of a story, and does not offer any detail of other Inca activities in the area, it does imply that the main Inca road from Cuzco to Quito goes through Saraguro. Furthermore, if the story has any

¹⁷ Original text reads:

Dicen que este gran Huaina Capac hizo hacer en esta gran ciudad del Cusco dos casas de cantería de piedra muy ricamente labrada, y hechas las hizo deshacer, piedra por piedra, y mandó que las tornaran a hacer en Quito; y para el dicho efecto llevaron todas las piedras y llegando con ellas junto a Quito, en los Cañares, en un pueblo que se llamaban *Saraguru*, cayó un rayo y quebró la piedra principal del edificio que se había de atravesar en la puerta principal, y sabido por el Inga que le avisaron, lo temió y tuvo por mal agüero, y mandó que la dejasen allí toda la dicha piedra, a donde está hoy en día en el dicho lugar, junto al camino real (Murúa 1946 [1605]:196).

basis in real events, it would have archaeological consequences, namely, there should have been a scattering of finely worked stones near where the Inca road passes through the Saraguro area. Murúa's account also places Saraguro within Cañari territory, which lends credence to the supposition that Saraguro was administered by the Incas as part of the Cañari province.

Murúa's account brings to mind Guaman Poma's description of the site of Conchanuma, where he located the stones that Guayna Capac ordered carried to Cuzco. Though Guaman Poma's description deals with stones going in the other direction, they both share the elements of having been sent by Guayna Capac, and being left somewhere along the way between Cuenca and Loja. Guaman Poma worked with Murúa and utilized much of his information, so the accounts most likely share a common origin, and because Murúa's story is more detailed, it is probably the more accurate of the two. Furthermore, the theme of Guayna Capac sending worked stones from Cuzco to Ecuador also shows up in Cieza's chronicle, where he relates how:

Some Indians liked to say that the majority of the stones with which are built the lodgings and temple of the sun had been brought from the great city of Cuzco by order of the king Guaynacapa and the great Topainga, his father, with large ropes, which is no small wonder (if it was so), given the grandness and the great number of stones and the great length of the road [Cieza de León 1984 [1553]:145, translation mine].¹⁸

Garcilaso de la Vega (1966 [1609]) elaborates on Cieza's passage, stating that the

¹⁸ Original text reads:

Algunos indios quisieron dezir, que la mayor parte de las piedras con que estauan hechos estos aposentos y templo del sol, las auían traydo de la gran ciudad del Cuzco, por mandado del rey Guaynacapa, y del gran Topaynga su padre, con crecidas maromas, que no es pequeña admiración (si assí fuesse) por la grandeza y muy gran número de piedras, y la gran longura del camino (Cieza de León 1984 [1553]:145).

Indians had told Cieza of the act of bringing the stones to Tomebamba from Cuzco, "rather with the object of boasting of the great favor shown them by the Inca kings than in order to emphasize the toil it had cost them to bring them so far" (Garcilaso de la Vega 1966 [1609]:488). Though he is skeptical of the feat, Cieza's account makes it likely that stones were indeed carried from Cuzco through Saraguro, and thus Murúa's story is quite plausible. Putting together that account and the bits from Guaman Poma, it is possible that the site of Conchanuma is located near Saraguro, and that cut stones from Cuzco could be located there.

In summary, the ethnohistorical accounts of Inca construction in the Saraguro region are spotty, but they do reveal a tambo called Tambo Blanco, which may also be called Auna, and it is almost certain that the main Inca north-south highland road ran through Saraguro, and "by nearly all early historical accounts, the Cuzco-Quito highland route was the most important road in the empire" (Hyslop 1984:257). Furthermore, there was possibly a tambo named Conchanuma located near Saraguro, and that native laborers may have abandoned some fancy cut stones from Cuzco in the area.

Economic Focus

Unfortunately, the available ethnohistorical records reveal nothing about the focus of Inca economic interests in the Saraguro area. A general focus on agricultural production might be assumed for much of the greater Palta region, but there are hints that other products were emphasized in certain spots. For instance, the Incas are said to have exploited the mines of Zamora, which lie to the east-southeast of Saraguro:

I certify on my honor, that so much is the greatness of the richness of those mines, that I understand, especially with several mines that were later discovered here, that in the time of the *Ingas* they were theirs and they were

worked by them and for them, from where they say that the greater amount of the gold that they carried to the *Ingas* and that they had, was from these mines; and that at the time when the Spaniards entered in *Caxamalca* and the Indians knew that they were looking for gold and silver, they were blocked up, as they were so rich; and now it is said there is a law suit among the Spaniards about them [González de Mendoza 1897:262, translation mine, emphasis in original].¹⁹

Likewise, there were gold mines at Zaruma, to the west-southwest of Saraguro, which were extensively exploited by the Spaniards, and could have been utilized by the Incas as well. Both of those mines were located within a few days journey of Saraguro, and natives from the Saraguro area could have been obligated to work in these mines as part of their *mita* service to the Incas.

Pedro Arias Dávila tells us that the lower Jubones valley was at one time used for the production of coca: "...and thus they [the rivers] join together in a large, very hot and ill valley, wherein one is not able to live, and thus nothing grows except for prickly pear cactus, although in past times they had all of the land cultivated with fields of *coca*; today there is none..." (Arias Dávila 1897 [1582]:180, translation mine, emphasis in original).²⁰ The dry and hot Jubones Valley, with irrigation, would be a suitable setting for growing coca, and though Arias Dávila does not specify who was growing the coca there, the large scale of production suggested by his description

¹⁹ Original text reads:

Certifico mi fee, que es tanta la grandeza de riqueza de aquellas minas, que entiendo, especialmente con algunas minas que despues acá se han descubierto, que en tiempo de los *Ingas* eran suyas y las labraban por ellos y para ellos, de donde dicen que la mayor cantidad de oro que á los *Ingas* les llevaban y ellos tenian, eran de estas minas; y que al tiempo que los españoles entraron en *Caxamalca* y los indios conocieron que buscaban oro y plata, las cegaron, por ser tan ricas; y ahora se dice hay pleito entre los españoles sobre ellas (González de Mendoza 1897:262, emphasis in original).

²⁰ Original text reads:

^{...}y ansí se juntan y van por un gran valle tan caliente y enfermo, que no se puede habitar en él, y ansí no se cria cosa nenguna sino tunas, aunque en tiempo pasado tenian toda la tierra cultivada de chácaras de *coca*; hoy dia no la hay... (Arias Dávila 1897 [1582]:180, emphasis in original).

is certainly the type of endeavor the Incas would undertake for such an important resource.

Lastly, there was probably some emphasis on the use of camelids in the province, as Cieza noted that "there are many guanacos and vicuñas, which are their form of sheep..." (Cieza de León 1984 [1553]:182, translation mine)²¹ in the Loja region. As the Incas used llamas as pack animals throughout most of the empire, there is no reason to assume Saraguro and the province of the Paltas were an exception. Because the main Inca road ran through Saraguro, it is certain that camelids were cared for at stops along the way. Whether there was much emphasis on the herding of camelids by local people before or during the Inca Period is unknown.

ETHNIC GROUPS IN LOJA AND SARAGURO: PALTAS, CAÑARIS, AND MITMAQKUNA

To supplement the oral traditions telling of *mitmaqkuna* in Saraguro, ethnohistorical records ideally could provide details on what people were living in Saraguro when the Incas arrived, what the Incas did with them, who was brought in to replace them or live among them, and what roles these newcomers performed. Unfortunately, few relevant data have surfaced so far on the Inca resettlement projects around Saraguro. However, the ethnohistory does provide enough data to establish the presence of *mitmaqkuna* in Loja and to situate the prehispanic inhabitants of Saraguro within the greater context of the native ethnic groups of Loja and Azuay.

²¹ Original text reads:

Ay muchos Guanacos y Bicunias que son de la forma de sus ouejas...(Cieza de León 1984 [1553]:182).

Paltas

As stated above, the ethnohistorical accounts generally concur that Saraguro was in the realm of the Paltas, who were said to inhabit much of the Spanish territory of Loja. Unfortunately, the Paltas have ceased to exist as a viable ethnic group, and thus there is no oral tradition to draw upon and no indigenous interest in their past. So as it stands, the information base on the Paltas is quite meager. The available ethnohistorical accounts and the historical research done on the Paltas suggests that they were not a homogeneous culturally unified ethnic group. In fact, it has been pointed out (e.g., Murra 1946 [1605]:801; Caillavet 1989) that there were other aboriginal groups, such as the Malacatos, the Garrochambas, the Ambocas, and the Calvas, named as occupying parts of the territory attributed to the Paltas. Caillavet concludes that the southernmost highlands of Ecuador were inhabited by a collection of ethnic groups that were independent from each other economically and politically, yet were able to organize themselves as allies against the Incas. She also speculates that the term Palta refers to a generic appellation used to refer to all of the ethnic groups of that region. This type of name game is not unheard of in the area, as the word "Jívaro," which basically means "savage," has long been used to refer to the Amazonian inhabitants of eastern Ecuador. These people of the Oriente belong to at least two distinctive ethnic groups, the Shuar and the Achuar, and are now making the effort to get people to refer to them by their chosen names, and thus gain the respect symbolized by the abandonment of the more offensive term "Jívaro."

The name "Palta" may have been taken from an indigenous word for "avocado" and applied to all the groups in the province, rather than the other way around, as might be assumed. It does not seem that the word "Palta" was a word the natives used to refer to themselves. This conclusion is suggested by Garcilaso's

description of the Paltas:

The tribe's distinguishing mark is the flattening of the head: when a child is born a small board is placed before its forehead and another behind its nape and the two are fastened together and daily drawn a little tighter. The baby is kept lying on its back and the boards are not removed until it is three years old: the result is a very ugly deformation of the head. Thus any Indian whose forehead was broader than usual or whose nape was flat would be scornfully referred to as *palta uma*, "Palta head" [Garcilaso de la Vega 1966 [1609]:485-486, emphasis in original].

The head shape resulting from this type of cranial deformation may have actually resembled the shape of an avocado, and thus *Palta uma* may simply have been an insult meaning "avocado head" rather than "person with Palta-type cranial deformation." Thus, the word "palta" may have been employed by the Inca to refer to all of the people in this area that shared this style of cranial deformation, conflating in this category many small groups who considered themselves culturally or ethnically distinct from the others. Garcilaso also tells us how a similar derisive term was applied in reference to the Cañaris:

They wore their hair long as a distinguishing mark. It was piled up on top of the head and then twisted into a knot. The nobler and more elegant wore as headgear a perforated hoop, about three fingers high in the middle, through which colored skeins were passed.

The poorer people and those less careful in their dress substituted a similar strip from a gourd for the hoop and for this reason the whole Cañari tribe was known to the other Indians for the insulting name of *matiuma*, "gourd-head" [Garcilaso de la Vega 1966 [1609]:485].

The case of the Cañaris shows that the practice of disparaging members of an ethnic group by likening their heads to fruits and vegetables was not specific to the Paltas. Furthermore, the *matiuma* designation for the Cañaris implies that "palta" was more a slur than a proper classification of ethnic affiliation. If that is so, then no all-encompassing *indigenous* label for the natives of this region has survived.

It seems most likely that there was no such native appellation, but that "Palta" was put into service to designate a number of only loosely related or allied groups. That the region was populated by a collection of ethnically distinct groups seems to be supported by the ethnohistorical data, but whether they were culturally distinct remains to be investigated. Caillavet (1989:173) reasons that the fact that the Palta groups could unite to fight a common enemy proves that there was a cultural unity among the groups. But in facing a threat as menacing as the Inca Empire, it is conceivable that very diverse groups could have overlooked their historic animosities and united to fight the common enemy. Indeed, that is what is implied in Cieza's and Garcilaso's accounts of the province, as described above. Otherwise, Caillavet's conclusion that there were numerous indigenous groups in that zone who were classified under the generic term "Palta" is very reasonable. As a number of ethnohistorical documents have already been perused in pursuit of the "Palta question" it is likely that only archaeology will be able to provide more evidence on the question of cultural, political, or ethnic unity in the province of Loja in pre-Inca times.

In summary, the concept of a Palta ethnic group in the Loja area does not seem viable. Nonetheless, without a suitable alternative, and in light of the term's prevalence in the ethnohistory, I will continue to use the name with the understanding that it refers to the non-*mitmaqkuna* and non-Inca natives of the greater Loja region. Essentially, it is more useful in this case as a description of a geographic relation rather than as an ethnic or cultural affiliation.

Cañaris

In contrast to the Paltas, the Cañaris, who inhabited much of the territory of the modern provinces of Azuay and Cañar, appear to have constituted a more meaningful ethnic grouping upon the arrival of the Incas. There were many more people self-identified as Cañaris than there were "Paltas," and there were many subgroups spread throughout their territory. The southern border of their land is generally thought to be somewhere north of Saraguro where the southernmost Cañari lands of Cañaribamba and Leoquina lay. However, there is evidence that they also inhabited parts of the region of Loja, as Salinas recounts:

In the district of the said city [Loja] there are three different types of people, nations, or languages. The one language is called *cañar*, and the other *palta*, and the other *malacatas*, of which these last two, although they differ somewhat, are mutually understood; and thus they are different in customs and in dress, and even in character, because the Cañar people are more domestic and more sensible than the Paltas [Salinas Loyola 1897 [1571 or 1572]:213, translation mine].²²

Salinas did not distinguish where within the province the people of these different ethnic groups were living. The Malacatas, or Malacatos, who lived to the east of the city of Loja, were seen as related to the Paltas because of the mutual intelligibility of their languages, but otherwise, little is known about them. It seems likely that they were native to the area, and just another facet of the ethnic milieu of the province.

The presence of Cañaris in the region during his time does not necessarily

²² Original text reads:

En términos de la dicha ciudad hay tres diferencias de gentes, naciones ó lenguas. La una lengua se dice *cañar*, y la otra *palta*, y la otra *malacatas* (así), questas dos últimas, aunque difieren algo, se entendienden (así); y así son diferentes en hábitos y en trajes, y aun en condiciones, porque la gente *cañar* es gente más doméstica y de más razon que no la *palta* (Salinas Loyola 1897 [1571 or 1572]:213).

represent the pre-Inca situation, and it is entirely possible that they were *mitmaqkuna* moved there under the Incas, much as they were placed in other provinces throughout Tawantinsuyu to serve guard duty (Espinoza 1988a:345-346). Furthermore, the extensive movement of people during early Spanish rule could have brought Cañaris into the province to escape the heavy tribute they would have been subjected to in their homeland. On the other hand, the tendency for *mitmaqkuna* to return to their ethnic lands of origin during that period may have meant that Cañaris living in the province of Loja were actually re-inhabiting their traditional territory.

More detailed information comes from Padre Gregorio García, who actually identifies a native group in Loja as Cañari. Among his disparaging remarks about the Paltas, he mentions the indigenous Ambocas of the province: "...the Paltas are only good for making adobes for the works of the Spaniards, because there are others who place them, called Ambocas, who are Cañaris" (García 1729:106, translation mine).²³ According to Caillavet (1989:175), the Ambocas inhabited the region bordering Chaparra on the west, but we have no other information relating to their "Cañariness." This location next to Chaparra hints at the possibility that the Saraguro region was also home to Cañaris before the arrival of the Incas.

Even though we have these indications that ethnic Cañaris were residing in the province of Loja during Spanish colonial times, the accounts are ambiguous as to whether this could represent the pre-Inca ethnic arrangement, or was the result of forced resettlement during the Inca occupation. It seems more likely to reflect the pre-Inca arrangement, as the enclave of Ambocas is not far from recognized Cañari

²³ Original text reads:

^{...}solamente sirven los Paltas de hacer adobes para las Obras de los Españoles, porque otros son los que los ponen, llamados Ambocas, que son Cañaris (García 1729:106).

territory, and the Incas would have taken the natives of this region much farther from their homelands. On the other hand, the Ambocas sector could have been an underpopulated region that the Incas wished to utilize for some economic purpose, and thus Cañari *mitmaqkuna* could have been considered.

There is one item that hints that at least some indigenous people of Saraguro itself were Cañaris. In a *visita* from 1606-1607, listed among the "indios criollos" are the following:

Don Pedro Felipe Quicha Guano, resident in the said city of Popayán, where he has his house. Of the age of twenty-two years according to his appearance. Married to Inés Palla, absent, of whom they say it will have been two years since she fled to Pasto, and who will be of the same age as that said of her husband. Without children. He has in his company and house his legitimate mother Jhoana Cañar of Zaraguro, of the age of forty-six years, widow [Espinoza Soriano 1988b:127, translation mine].²⁴

"Cañar" after her first name of Don Pedro's mother could represent her last name or an ethnic designation, in which case the passage would more properly be translated as "Jhoana, Cañar of Saraguro." Either way, it seems to imply that this woman was an ethnic Cañari from Saraguro (John H. Rowe, personal communication 1996). Otherwise, no other document has come to light that places Cañaris in Saraguro.

Mitmaqkuna

The extent of Inca-orchestrated resettlements in the province of the Paltas is

²⁴ Original text reads:

Don Pedro Felipe Quicha Guano, residente en la dicha ciudad de Popayán, donde tiene su casa. De edad de veinte y dos años según su aspecto. Casado con Inés Palla, ausente, que dicen habrá dos años que se huyó a Pasto, y que será de la mesma edad que el dicho su marido. Sin hijos. Tiene en su compañía y casa a su madre ligitima llamada Jhoana Cañar de Zaraguro, de edad de cuarenta y seis años, viuda (Espinoza Soriano 1988b:127).
unclear, but it could have been massive. Cieza de León made the earliest mention of *mitmaqkuna* in the domain of the Paltas: "...the peace was established that day and the next the province was filled with mitimaes and with a governor..." (Cieza de León 1985 [1553]:163, translation mine).²⁵ But there is little of specific value in that statement because Cieza may have been applying a generalization about Inca provinces, and he was describing the conquest of several provinces, including that of the Paltas, Caxas, Ayavaca, and Guancabamba.

However, Salinas is more straightforward in noting that *mitmaqkuna* were located within the district of Loja:

That in the valley where is settled the said city [Loja] there are some native Indians of the valley, and likewise all of the caciques of all of the provinces and towns have there Indian settlements, as the land is fertile; and they have their farmlands that they plant and cultivate, from which comes much benefit, and the said city benefits as well in the way of its sustenance; those Indians thus settled are called *mitimaes*, that is as much to say "outsiders" [Salinas Loyola 1897 [1571 or 1572]:214, translation mine].²⁶

Notably, Salinas only refers to the natives in question as "mitimaes," and mentions no others, when elsewhere he discusses Paltas, Cañaris, and others inhabiting the province. Perhaps Salinas was only referring here to the Indians closest to the city, rather than within the whole province. Nonetheless, Salinas' account is one of the best confirmations that there were *mitmaqkuna* in the province of Loja.

More specific information on the resettlements undertaken in the region is

²⁵ For complete original text, see Footnote 4.

²⁶ Original text reads:

Que en el valle donde está poblada la dicha ciudad hay algunos indios naturales dél, y asimismo todos los caciques de todas las provincias y pueblos tienen alli poblados indios, por ser la tierra fértil; y tienen sus heredades que siembran y benefician, de que se les sigue mucho provecho, y asimismo á la dicha ciudad, para su sustento; los cuales indios así poblados se llaman *mitimaes*, que quiere decir tanto como "advenedizos" (Salinas Loyola 1897 [1571 or 1572]:214).

found in Fernando Montesinos' 1642 relation of the Inca conquest of the Paltas:

...he gave the order that many families of them were to be transplanted among the most distant subjects of the realm and climates most similar to their own; he sent part of them to Cuzco and part of them to Collao, and others to Chachapoyas, Xauxa, Andaguáilas, and Cotabamba, and today some remain and they are called *mitimaes*. And from the mentioned peoples he also transplanted in those provinces other families; in order that, according to the Inga, people of different nations do not take up arms against the lord [Montesinos 1882 [1642]:137-138, translation mine].²⁷

Because Montesinos may not be a very reliable source (Rowe 1946:197), and is certainly misguided in describing Viracocha as the Inca who conquered the Palta region (see above), the veracity of this passage is somewhat suspect. However, the story of filling the province with *mitmaqkuna* agrees with the above accounts of Cieza de León and Salinas Loyola, and thus there may be some truth in the details Montesinos listed as to where the Paltas were sent as *mitmaqkuna*. In fact, there is potential to cross-check for the existence of Palta *mitmaqkuna* in those provinces, by examining any detailed *relaciones* or *visitas* available from those areas. There is evidence of resettled Paltas in the province of Huánuco in highland Peru, even though it was not listed by Montesinos or other chroniclers as a destination for Palta *mitmaqkuna*. Specifically, in the village of Malcunga, there were listed "three Indians of Paucar Guaman and eight more mitimaes chachapoyas and cayambes and paltas and four widows who all were of Paucar Guaman" (Ortiz de Zúñiga 1967 [1562]:295,

²⁷ Original text reads:

^{...}dió órden de que muchas familias destos se trasplantasen entre los vasallos más confinantes del reino y temples más semejantes á los suyos; envió parte dellos al Cuzco y parte al Collao, y otros á Chachapoyas, Xauxa, Andaguáilas y Cotabamba, y hoy se conservan algunos y se llaman *mitimaes*. Y de los pueblos dichos tambien trasplantó en aquellas provincias otras familias; porque decia el Inga, que gente diversaen naturaleza no se armaba contra el Señor (Montesinos 1882 [1642]:137-138).

translation mine).²⁸ From this statement, we know that at least some natives from the Loja region were still identified as Paltas after they had been transplanted by the Incas, but in this case, they did not make up a significant community.

Within former Palta land, Caillavet (1989:164) suggests colonies of *mitmaqkuna* may have been situated in Saraguro, Catacocha, Cariamanga, and Nambacola. As evidence, she cites the Quichua-derived names of the communities and the use of the term "collana" in documents referring to natives of these areas, for example: "Don Mateo Sarango cacique de Collana del pueblo de Saraguro" (Archivo de la Corte Superior de Justicia, Loja [ACS/L] 1792, in Caillavet 1989:164). However, "collana" does not refer to a person's place of origin, but to a social position. In the cases cited by Caillavet, "collana" is probably a reference to social status or a political position, notably, a head chief, or chief of chiefs (John H. Rowe, personal communication 1996). In Inca kinship organization, there were three divisions, which, in order of descending rank, were *collana, payan*, and *cayao*. These terms referred to relative ranks of divisions within ayllus and within one's own lineage (Rowe 1985b, Zuidema 1966), thus the use of those terms in the Palta area may be a result of Inca influence, but do not necessarily reflect the presence of *mitmaqkuna*.

One other general indicator of the presence of *mitmaqkuna* in the province comes from the distinctions of headgear. During the Inca reign, each ethnic group had a distinctive hairstyle and type of headgear, which the Incas required them to maintain wherever they went as a marker of their origins (Rowe 1982:111), so describing natives by their headgear is almost equivalent to naming their ethnic

²⁸ Original text reads:

[&]quot;Este día visitamos en Malcunga tres indios de Paucar Guaman y más ocho mitimaes chachapoyas y cayambes y paltas y cuatro viudas son todos de Paucar Guaman" (Ortiz de Zúñiga 1967 [1562]:295).

affiliation. I have already discussed the cranial deformation that was reportedly practiced by the Paltas, and the style of Cañari headgear, both discussed by Garcilaso (1966 [1609]:485-486). Gregorio García has described the phenomenon as observed from Loja:

...and each nation is distinguished by what they wear on their heads; because some wear a loop of two or three fingers in width, as do those who are called Ambocas, Cañaris, and Paltas: others, those crowns of wool wrapping, who are those of Quito, and Puruhaes, and those of Cuzco wear a long band, which they wrap around many times, which is called llautu [García 1729:77, translation mine].²⁹

It is interesting that the Cañaris and Paltas were said to wear the same thing, while the natives to the north wore some sort of wool wrappings, a style which may have persisted to the present in the headgear of the indigenous women of Otavalo. Interestingly, the Cuzco natives were distinguished by wearing *llautus*, and this was the same item that Cieza de León said was worn by the natives in the Loja region: "On both sides of where this city of Loja was founded there are many and very large villages, and the natives of those have and maintain almost the same customs that their neighbors use. And to be recognized they have their *llautus* or bindings on their heads" (Cieza de León 1984 [1553]:181, translation mine).³⁰ It is odd to think that there would be such a change where the "Paltas" would have gone from wearing the

²⁹ Original text reads:

^{...}i cada Nacion se diferencia por lo que traen en la cabeça; porque unos traen un Haro de dos, ó tres dedos en ancho, quales son los que llaman Ambocas, Cañares, i Paltas: otros, aquellas coronas rolliças de lana, que son los de Quito, i Puruaes, i los del Cuzco traen un Cingulo largo, con que dán muchas bueltas, al qual llaman Llautu (García 1729:77).

³⁰ Original text reads:

A vna parte y a otra de donde está fundada esta ciudad de Loxa ay muchas y muy grandes poblaciones: y los naturales dellas casi guardan y tienen las mismas costumbres que vsan sus comarcanos. Y para ser conoscidos tienen sus llautos o ligaduras en las cabeças (Cieza de León 1984 [1553]:181).

Inca-style *llautu* to wearing a Cañari-style headdress, but it is also possible that what Cieza described was the dress of the *mitmaqkuna* in the Loja area, rather than that of the native "Paltas." If the inhabitants Cieza describes were *mitmaqkuna*, this description would match Salinas' statement about *mitmaqkuna* around the environs of Loja.

Unfortunately, the *mitmaqkuna* status of the Saraguro inhabitants is barely touched on in known ethnohistorical documents. None of the major chroniclers specifically mentions *mitmaqkuna* in Saraguro, and neither do any of the known documents of Salinas. On the other hand, no known source indicates that "Paltas" were still inhabiting the Saraguro during or after the Inca occupation. One tantalizing piece of evidence is a document that is reported to exist in a Spanish archive that states that the *mitmaqkuna* of Saraguro were elite troops in the Inca army (J. Belote and L. Belote 1994c:II:3; L. Belote and J. Belote, editors, 1994:11-12). That document is potentially very important, but until more detail is made available, this brief note of its contents will have to suffice. Otherwise, there is no other direct documentary evidence touching directly on this question of Saraguro *mitmaqkuna*.

The strongest indication we do have as to the Saraguros' *mitmaq* status is oral tradition. It is common knowledge (or belief) among the Saraguros that their ancestors were indeed *mitmaqkuna* who were brought to the region during the Inca Period. There is some knowledge passed down about the specific origins of their ancestors, as evidenced by the Saraguro native who told that at least some of the Saraguros were originally Collas from Bolivia (Moya 1981:55). I personally have heard from Saraguros that they are aware that they have *mitmaq* origins, possibly from around Lake Titicaca or Cuzco, but that the knowledge about that past is hazy and they would like a clearer picture. Historians have often remarked on the *mitmaqkuna*

origins of the Saraguros (e.g., Jaramillo Alvarado 1982:36), but without elaborating on their sources for such claims; presumably they were likewise drawing from local oral tradition.

SARAGURO DURING THE SPANISH CONQUEST

While this project does not directly address issues related to post-Inca times, events that transpired in the region during the Spanish conquest and early Spanish occupation could potentially reflect the nature of the Inca occupation and ethnic make-up of the region.

For instance, in 1534, the early stage of the Spanish conquest, the Saraguro area figures as the possible scene of battles between the Spanish conquerors and the forces of two of Atahuallpa's generals. After Francisco Pizarro had captured and executed Atahuallpa, the Spaniards turned their eyes toward conquering Ecuador, where there were said to be great treasures, up to 600 loads of it according to Cieza de León (1987 [1553]:180), and cities with riches rivaling those of Cuzco. Sebastián de Benalcázar led a force from Piura on the North Coast of Peru, up into the highlands of southern Ecuador to forestall the taking of Quito, as the northern sector of the Inca Empire was referred to, by the rival conquistador Pedro de Alvarado, who had landed with a large force on the Ecuadorean coast.

The Inca army's first act of resistance in Ecuador against the forces of Benalcázar may have been made near Saraguro. Cieza describes the march of Benalcázar up to the site of Zoropalta:

Having then left Carrochamba, Velalcáçar and his troops suffered great hardships of hunger and cold when crossing through the wilderness until arriving at Çoropalta. They had news that they were near the province of the Cañares, where they would find many supplies. As they were a little more than four leagues from Tomebamba, which is the capital of that land, Velalcáçar went ahead with thirty horsemen, leaving the rest of the men under the command of Pacheco [Cieza de León 1987 [1553]:180-181, translation mine].³¹

Rumiñabi and Çopeçopagua, who was the governor of Quito, had determined that a captain of the lineage of the Yngas called Chuquitinto would go to place himself with a garrison of troops near Çoropalta to vex the Christians, their enemies, before they could enter in the land of the Cañares. He volunteered to do a great deed. He took with him a few more than one thousand men of war. Having made a stop near Çoropalta, he hoped for the Spaniards to arrive, seeming to him and to those who accompanied him that they would have no difficulty in routing and killing them all.

Velalcáçar, having gone forward with his troops, as I have said, with thirty horsemen, arrived in sight of the warriors and they were so astonished to see horses and what was now on them, that, filled with fear and dread, they began to flee. The Spaniards pursued them, capturing some men and women, among whom was caught a woman who had been wife of Guaynacapa [Cieza de León 1987 [1553]:182, translation mine].³²

Caillavet (1989:175) has deduced that the territory named Carrochamba (or

Garrochamba) was located west-southwest of Saraguro, and west of Ambocas

³¹ Original text reads:

Avía ya salido de Carrochamba Velalcáçar y pasó con su jente gran trabajo de hanbre e frío quando caminó por el despoblado hasta llegar a Çoropalta. Tenían nueva cómo estava çerca la provinçia de los Cañares, donde hallarían mucho proveymiento. Como estuviesen poco más de quatro leguas de Tomebamba, ques lo prençipal de aquella tierra, se adelantó Velalcáçar con treynta cavallos, quedando a cargo de Pacheco la demás jente (Cieza de León 1987 [1553]:180-181, emphasis in original).

³² Original text reads:

Avía determinado Rumiñabi e Çopeçopagua, que hera el governador de Quito, que fuese un capitán del linaje de los Yngas *llamada Chuquitinto* a ponerse con una guarniçión de jente çerca de Çoropalta para ofender a los cristianos sus enimigos antes que en los Cañares entrasen. Ofreçióse de hazer algúnd hecho grande. Llevó consigo poco más que mill honbres de guerra; y aviendo hecho alto çerca de Çoropalta, deseava que los españoles llegasen, pareçiéndole a él y a los que le aconpañavan no harían gran hazaña en los desvaratar e matar a todos.

Velalcáçar, aviendo adelantádose de su jente como se a dicho con treynta cavallos, llegó a vista de la jente de guerra y en tanta manera se asonbraron de ver los cavallos y que ya estavan ençima dellos, que llenos de temor y espanto començaron de huyr. Los españoles los siguieron, cativando algunos honbres e mugeres, entre los quales fue presa una señora que avía sido muger de Guaynacapa (Cieza de León 1987 [1553]:182).

territory, in part of the upper to middle drainage of the Tumbez river. According to Cieza, the Spaniards traveled from there to Zoropalta, though without further information, it is hard to determine how close this site was to Saraguro. From these reports, we can assume there was a settlement named Zoropalta, most likely an Inca site. Interestingly, the cold unpopulated region described resembles Cieza's description of his own trip between the sites of Las Piedras and Tambo Blanco. If the routes were the same, it would suggest that Zoropalta was Tambo Blanco, and the site where the Spaniards had rested in Carrochamba was Cieza's Las Piedras.

As the scene of this first, though fruitless, resistance of the troops of Rumiñahui against the Spaniards in Ecuador, the site of Zoropalta is certainly historically significant, but further information is necessary to clarify its place within the Inca administrative organization of Saraguro. Zoropalta is put at the border with Cañari territory, which, as we have seen from other accounts, could place it around the Saraguro area. In fact, the border of Cañari territory could be either north or south of Saraguro, depending on the perspective: from the Inca administrative arrangement of the provinces, Saraguro would have been part of the province of the Cañaris, but based on general ethnic territories, it was classified by the chroniclers as Palta territory.

It is problematic that Cieza implies that Zoropalta was only four leagues from Tomebamba, because that would put the site firmly within the Cañari domain, and outside of Saraguro territory. On the other hand, I doubt that any site would have "palta" as part of its name outside of what would have been Palta territory, unless perhaps it was a settlement of Palta *mitmaqkuna*. It is unlikely that Cieza had firsthand knowledge of Zoropalta, as he does not mention the site elsewhere in his chronicle, and, as discussed above, he may not have traversed that section of the Inca

road. He would have been relying on other sources, and thus, this measurement of four leagues could easily be erroneous.

Another version of this same encounter is provided by Antonio de Herrera. His 1610-1615 account of this stage of the Spanish conquest (Herrera 1944 [1610-1615]) has many parallels with Cieza's *Crónica del Perú Tercera Parte* (1987 [1553]), a work which served as a major source for Herrera. He recounting of the events relating to Zoropalta is practically verbatim from Cieza, and as he adds no new details, there is no reason to reproduce his account here.

After the ill-fated (from the Inca perspective) encounter at Zoropalta, the action moved north, where Rumiñahui and his troops continued to battle Benalcázar's forces. Later, as Atahuallpa's remaining general, Quisquis, was marching with a large army north from Condesuyo, the western quarter of the empire, he was surprised by the Spaniards Alvarado and Almagro. According to Augustín de Zárate's account from 1555, this reportedly took place in Chaparra province:

As Don Diego de Almagro and Don Pedro de Alvarado were on their way from Quito to Pachacamac, the *cacique* of the Cañaris informed them that Atahuallpa's captain Quizquiz was approaching with an army of more than twelve thousand warriors, having collected all the Indians and flocks that he had found from Jauja onwards. He promised that, if they would wait, he would deliver Quizquiz into their hands. But, putting no trust in this promise, Don Diego continued on his way, and when they reached the province of Chaparra they unexpectedly encountered two thousand Indians who were marching two or three stages ahead of Quizquiz under a captain called Sotaurco.

Quizquiz's dispositions were as follows: Sotaurco and his troops marched ahead; on the left flank went another three thousand men gathering food in the neighboring districts, and in the rear, two stages behind, were another three or four thousand men. Quizquiz himself marched in the middle with the main body, the sheep and the prisoners. His army therefore covered more than fifteen leagues of country from front to rear. Sotaurco was about to occupy a pass through which he thought the Spaniards would come, but Don Pedro de Alvarado arrived first and captured him. Learning Quizquiz's dispositions from Sotaurco, he made a night march with such of his horsemen as could follow him. They were forced to halt in the night, however, because as they rode down to the river the horses cast their shoes on the great boulders and had to be reshod by torchlight. They then continued on their way with great speed for fear that some of the many Indians whom they had met might go back to Quizquiz and tell him that the Spaniards were coming. They did not stop once until late next day they came into sight of Quizquiz's camp.

When Quizquiz caught sight of the Spaniards he went by one road with all his women and servants, and sent a brother of Atahuallpa called Guaypalcon with the soldiers by another, which was rougher. Don Diego went to meet those soldiers on the slopes of a hill, where he outflanked Guaypalcon and attacked him from the rear. Finding themselves surrounded, Guaypalcon and his men fortified themselves in a wild and rocky place and defended themselves till night. Don Diego and Don Pedro then collected all their Spaniards and Indians and went out into the darkness in search of Quizquiz, whom they found. But not before the three thousand Indians who formed his left flank had beheaded fourteen Spaniards whom they had taken in an attack. In the course of their march the two Spanish captains ran into Quizquiz's rearguard. The Indians took up a defensive position on a river bank, and prevented the Spaniards from crossing all that day. They themselves crossed the river upstream of the Spaniards and seized a hill. The Spaniards advanced to fight them, though they would have preferred to retire. But they could not do so since the ground was covered with thorny shrubs. So they suffered heavy casualties. Many were wounded, notably Captain Alonso de Alvarado, who was pierced in the thigh, and a certain Master of the Order of St. John.

All that night the Indians kept careful watch. But when dawn came they had retired from the river crossing and fortified themselves on a high peak, where Don Diego de Almagro left them in peace, not wishing to stay any longer. That night the Indians burnt all the clothing that they could not carry away. There remained in the camp more than four thousand men and women who had been Quizquiz's prisoners and who came over to the Spaniards [Zárate 1968 [1555]:147-148].

Francisco López de Gómara, who utilized the same source of information as

Zárate, provided a similar account:

When they [Almagro and Alvarado] arrived at Chaparra, they unexpectedly came across Sotaurco, who was traveling with two thousand men scouting the

road for Quizquiz, and they captured him fighting. Sotaurco told how Quizquiz was making a great expedition with the body of the army, and at the sides and flanks were each two thousand men, collecting provisions, which is how they were used to traveling in times of war: the horsemen were urged at once to get to Quizquiz before the news did. The road was such a rocky and steep descent, that the shoes came off most of the horses. They shoed by the fire, even though they feared that the enemy would take them while hindered. The next day in the afternoon they arrived within actual sight of Quizquiz, who, having seen them, went away with the gold and women on one hand, and on the other hand made that all of the very aggravated warriors were with Guaypalcon, brother of Atabaliba. Guaypalcon had a stronghold made in some tall cliffs, and threw boulders, which hurt many of our people: he went farther away that night, because he found himself without food and cut off. The horsemen traveled looking for him, and they could not defeat him, even though they killed some of them. Quizquiz and Guaypalcon joined together, and left for Quito, thinking that few or no Spaniards remained there, as so many had come down there. They had an encounter with Sebastian de Benalcaçar, and they were lost. The captains told Quizquiz to ask the Spaniards for peace as they were invincible: and that they would maintain the friendship, as they were good men, and not tempt the fate that was pursuing them so much. He threatened them, because they showed cowardice, and should instead carry on to rally themselves. They answered that he should make war, as it would be more honorable and relieving to die fighting the enemy than to die of hunger in the wasteland. Quizquiz dismissed them for that, swearing to punish the mutineers. Guaypalcon then hurled a spear blow at his chest: then many others came with axes and clubs, and they killed him: and thus Quizquiz ceased with his wars, who was such a famous captain among the Orejones [López de Gómara 1993 [1552]:Chapter CXXIX, unpaginated, translation mine].³³

³³ Original text reads:

Quando llegaron a Chaparra, toparon a deshora con Sotaurco, que yua con dos mil honbres descubriendo el camino a Quizquiz, y prendieronle peleando. Sotaurco dixo como Quizquiz venia detras vna gran jornada con el cuerpo del exercito, y a los lados y espaldas cada dos mil honbres, recogiendo vituallas, que assi acostumbraua caminar en tienpo de guerra: aguijaron presto los de cauallo, por llegar a Quizquiz antes que la nueva. Era el camino tan pedregoso y cuesta abaxo, que se desherraron casi todos los cauallos. Herraron a media noche con lumbre, y aun con miedo no los tomassen los enemigos embaraçados. Otro dia en la tarde llegaron a vista del real de Quizquiz: el qual como los vio, se fue con el oro y mugeres por una parte, y echo por otra que muy agra era toda la gente de guerra con Guaypalcon hermano de Atabaliba. Guaypalcon se hizo fuerte en unas altas peñas, y echaua galgas, que dañaron mucho a los nuestros: mas fuese luego aquella noche, porque se vio sin comida y atajado. Corrieron tras el los de cauallo, y no lo pudieron desbaratar, aunque le mataron algunos. Quizquiz y Guaypalcon se juntaron, y se fueron a Quito, pensando que pocos, o ningunos

These two descriptions of the last resistance of Quisquis are heavy on tactics and maneuvers, but unfortunately light on geographical context. As Chaparra is the only place mentioned by name, it could be assumed that at least some of these events took place within that region. Two other points can be drawn from the relations. First, there was more than one north-south Inca road in the region, as evidenced by the splitting of the troops to gather provisions along different routes, and later when Quisquis and Guaypalcon took separate roads. Secondly, though the Inca troops repeatedly used the tactic of fortifying themselves on hilltops, the omission of any mention of the use of forts suggests that there were no actual Inca or native forts in the area, or they would presumably have been utilized by one side or the other. Otherwise, we are left knowing only that some of these decisive events may have taken place near Saraguro.

Native Resistance in the Spanish Colonial Period

After the Inca armies had been defeated and the Spaniards had effectively assumed control of the remains of Tawantinsuyu, the former Palta territory lapsed into a state of chaos. Pedro Cianca, discussing events from 1545, stated "...and from there he went through a land of war in the company of the said Vela Nuñez through the

Españoles quedaron alla, pues venian alli tantos. Huvieron un recuentro con Sebastian de Benalcaçar, y fueron perdidolos. Dixeron los capitanes a Quizquiz que pidiesse paz a los Españoles pues eran inuencibles: y que le guardarian amistad, pues eran hombres de bien, y no tentasle mas la fortuna que tanto los perseguia. El los amenazo, porque mostravan cobardia, y mando que le siguiessen para rehazerse. Replicaron ellos que diesse batalla, pues les seria mas honra y descanso morir peleando con los enemigos, que de hanbre por los despoblados. Quizquiz los deshonro por esto, jurando de castigar los amotinadores. Guaypalcon entonces le tiro vn bote de lança por los pechos: acudieron luego con hachas y porras otros muchos, y mataron lo: y assi acabo Quizquiz con sus guerras, que tan famoso capitan fue entre Orejones (López de Gómara 1993 [1552]:Chapter CXXIX, unpaginated).

province of the Paltas" (AGI/S 1561, in Caillavet 1989:151, translation mine).³⁴ Apparently, at least some of the natives of the province had fortified themselves on hilltops, while combating other indigenous groups, as described by Salinas:

And after [the time of the Incas] the natives of the said provinces took advantage of the civil wars that were being fought to make their own wars, fortifying several mountains that had been most convenient to their settlements, in order to take shelter and to screen themselves in them when they could not resist their enemies [Salinas Loyola 1897 [1571 or 1572]:210, translation mine].³⁵

Elsewhere Salinas noted the difficulty the Spaniards had in subduing the natives of the province: "...for the conquest of the said provinces, the native Indians are very warlike and indomitable" (AGI/S 1565, in Caillavet 1989:152, translation mine).³⁶ But eventually, the Spaniards prevailed: "...that now there is no war between them, because they do not dare to make war after they were conquered, through having prevented them, they must live as brothers, and not to kill and rob as they were accustomed to;" (Salinas Loyola 1897 [1571 or 1572]:216, translation mine).³⁷ It is

³⁶ Original text reads:

³⁴ Original text reads:

[&]quot;...y de allí fue por tierra de guerra en compañía del dicho Vela Nuñez por la provincia de los Paltas..." (AGIS 1561, in Caillavet 1989:151).

³⁵ Original text reads:

Y despues los naturales de las dichas provincias se han aprovechado en las guerras civiles, contiendas que han tenido unos con otros, de hacer lo propio, fortalesciendo algunas sierras de las que habia de más comodidad en sus poblaciones, para recogerse y mampararse en ellas cuando no podian resistir á sus enemigos (Salinas Loyola 1897 [1571 or 1572]:210).

^{...}por estar las dichas provincias por conquistar e ser los yndios naturales della muy guerreros y yndomitos (AGI/S 1565, in Caillavet 1989:152).

³⁷ Original text reads:

^{...}que ya no hay guerra entrellos, porque no las osan tener despues que se conquistaron, por haberles prevenido que han de vivir como hermanos, y ni se han de matar y robar como solian; (Salinas Loyola 1897 [1571 or 1572]:216).

unclear from these reports whether all of the indigenous inhabitants of Loja were involved in fighting and who they were fighting, whether Spaniards, bordering ethnic groups, or their friends and families. Nonetheless, Salinas implies the Spaniards saved the natives from this chaotic situation, wherein the natives were used to living like thieves and murderers, and only after being conquered by the Spaniards would they live sedately.

After most of the other natives of the province had been quelled, Saraguro seems to have persisted as a pocket of resistance. There is evidence that the inhabitants of the region were both actively resisting Spanish domination and fighting with their Cañari neighbors to the north, up until at least when Cieza de León passed through Loja in 1547. At some point the Spaniards had to deal specifically with the natives of that area, as Alonso Cabrera related about the conquest of "the province of Chaparra, which is in los Paltas and other soldiers were conquering the natives of that land" (AGI/S 1569, in Caillavet 1989:152, translation mine).³⁸

The atmosphere of unrest appears to have been a prime motivation for the founding of the city of Loja, according to Cieza:

...and because the Spaniards who traveled along the royal road to go to Quito and to other parts were running the risk of the Indians of Carrochamba and of Chaparra, this city was founded, as I have already said; notwithstanding that, Gonzalo Pizzaro ordered it populated during the time he was enmeshed in his rebellion, the president Pedro de la Gasca, seeing that, in service to his majesty, agreed that the aforementioned city not be depopulated, approved its foundation, confirming the encomienda to those who were indicated as vecinos, and to those to whom, after the execution of Gonzalo Pizarro, he

³⁸ Original text reads:

[&]quot;la provincia de Chaparra que es en los Paltas y otros soldados estaban conquistando los naturales de aquella tierra" (AGI/S 1569, in Caillavet 1989:152).

gave Indians [Cieza de León 1984 [1553]:250, translation mine].³⁹ This passage implies that the Inca roads went through Chaparra and Carrochamba and the natives of those lands posed a threat to travellers. Cieza indicates that Loja was founded in response to this danger to travellers along the royal road. As was considered above, Cieza may have taken a detour around Saraguro for just this reason, and seeing as he was familiar with at least the name of the province of Chaparra, then it is notable that he never mentions passing through it, further supporting the idea that he did not in fact cross this zone.

In a later part of his chronicle, concerning the civil wars among the Spaniards, Cieza once again describes the rebelliousness of Chaparra: "...and, although the province of Chaparra and los Paltas was rebellious, and those barbarians were very bold, Sandoval, with those who went with him, passed through all of those settlements and such difficult roads, which pass over the lofty mountains, until arriving where Captain Vergara was..."(Cieza de León 1994 [1554]:174, translation mine).⁴⁰ Cieza depicts Chaparra as a dangerous land that should only be traversed under dire circumstances, and yet this one Spaniard, Diego de Sandoval, proceeded to

³⁹ Original text reads:

^{...}y porque los españoles que caminaban por el camino real para ir al Quito y a otras partes corrían el riesgo de los indios de Carrochamba y de Chaparra, se fundó esta ciudad, como ya está dicho; la cual, no embargante que la mandó poblar Gonzalo Pizarro, en tiempo que andaba envuelto en su rebelión, el presidente Pedro de la Gasca, mirando que al servicio de su majestad convenía que la ciudad ya dicha no se despoblase, aprobó su fundación, confirmando la encomienda a los que estaban señalados por vecinos, y a los que, después de justiciado Gonzalo Pizarro, él dio indios (Cieza de León 1984 [1553]:250).

⁴⁰ Original text reads:

^{...}y, aunque estava la provinçia de Chaparra e los Paltas alçados, y heran aquellos bárbaros muy hosados, Sandoval, con los que con él iban, pasó por todos aquellos pueblos y caminos tan fragosos, que atraviesan por las encunbradas syerras, hasta que allegó adonde estava el capitán Vergara...(Cieza de León 1994 [1554]:174).

cross the land. We actually have a testimony from Sandoval, wherein he gives some interesting details of his journey, which occurred around 1541-1542:

...the said governor [Sebastián de Benalcázar], Captain General of the Marquis Don Francisco Piçarro, sent the said Captain Diego de Sandoval with certain people on a certain undertaking. He captured the said Doña Francisca and several women who had served her and questioned her through the interpreter and she said that she was the daughter of the lord of Peru Guayna Caba...this witness with the said Captain Diego de Sandoval...they left to pillage a province called Chaparra, they captured the said noblewoman who was later called Doña Francisca, and before she was pursued and captured, she was known as the daughter of the said Gueynacaba...she was brought in front of the General and was examined and it was learned thus to be the truth and he gave her to the said Captain Diego de Sandoval...all of the natives of the said kingdoms of Peru have much veneration for the said Doña Francisca [AGI/S 1545, in Caillavet 1989:167, translation mine].⁴¹

It is amusing to note that while Cieza portrays Sandoval as accomplishing a feat of bravery, Sandoval himself says that they were going to Chaparra to pillage. Nonetheless, the important lesson is that an Inca noblewoman, a daughter of Huayna Capac, was residing in that territory. Caillavet interprets this to mean that the Inca control of the northern part of Loja province was much tighter than elsewhere in Palta territory. This may have been true, and furthermore, the area may have been considered a safe, reliable stronghold for the Incas, if a daughter of the last undisputed

Inca, and thus sister and potential mate to Huascar and Atahuallpa, was sequestered

⁴¹ Original text reads:

^{...}siendo el dicho adelantado (= Sebastián de Benalcázar) capitán general del marqués D. Fco. Piçarro embió a cierta entrada al dicho capitán Diego de Sandoval con cierta gente en cierto alcance tomo a la dicha Doña Francisca e a ciertas mujeres que le servían entonces e le preguntaron con las leguas e dixo que hera hija del señor del Peru Guayna Caba...este testigo con el dicho capitán Diego de Sandoval...salieron a ranchear a una provincias que se decían Chaparra tomaron la dicha cacica que después llamaron Doña Francisca e que luego que le tomaron e antes yban en seguimiento della e se supo ser hija del dicho Gueynacaba...trayda ante el General se esaminó e se supo ser así la verdad e la dio al dicho capitan Diego de Sandoval...todos los naturales de los dichos reynos del Peru thenian en mucha beneración a la dicha Dona Francisca (AGI/S 1545, in Caillavet 1989:167).

there during the upheavals following Atahuallpa's death. In fact, according to Hemming (1970:346),⁴² this Doña Francisca was a sister-wife of Atahuallpa, thus the people safeguarding her were likely to be a pro-Atahuallpa faction.

Unfortunately, we are again left with little information on the exact location of where in the province of Chaparra, or at which Inca hold Doña Francisca was found by the Spaniards. One may assume it was at either Paquishapa or Tambo Blanco, as those are the two main Inca sites indicated within what could be deduced as the province of Chaparra. Presumably, there could have been other Incas residing there, possibly nobles, soldiers, priests, or other functionaries. Any natives, whether locals or *mitmaqkuna*, who were stationed at that site would have to have been considered rather loyal to be entrusted with such a task as guarding a royal daughter, and in this region, it was more likely to be *mitmaqkuna* than local people.

Not only were the unruly natives of Chaparra/Saraguro attacking Spaniards (and being attacked by them), but they were fighting with ethnic Cañaris as well. First of all, it was noted of the Cañaris of Cañaribamba, which is situated to the northwest of Saraguro: "And that in that time they carried on war with another province called Chaparra, which is twenty leagues from this town of Cañaribamba" (Gómez et al. 1897 [1582]:184, translation mine).⁴³ Then there is this report from the territory known as Leoquina or Pacaybamba, located to the north of Saraguro and east of Cañaribamba:

⁴² Hemming (1970:346) errs in saying that the Chaparra where Sandoval captured Doña Francisca was in Colombia. From Cieza's account, it is clear that Sandoval was going through the Chaparra of southern Ecuador.

⁴³ Original text reads:

Y que en aquel tiempo traian guerra con otra provincia que llaman *Chaparra*, questá veinte leguas deste pueblo de *Canaribamba* (Gómez et al. 1897 [1582]:184).

They [the Cañaris of Leoquina] warred with a province called Saraguros, which is seven and eight leagues from this land; this is because they [the Cañaris] were friends of the Spaniards, and thus they gave their obedience to the Spaniards, and these Saraguros did not, instead earlier they killed many Spaniards in ambushes and along roads and warred with them and with Cañaribamba, because they did not serve the Spaniards [Arias Dávila 1897 [1582]:178, translation mine].⁴⁴

Here there are two separate instances where the residents of lands to the north of Saraguro, presumably ethnic Cañaris, were at war with people to the south; in one case, the people of Chaparra were mentioned, and in the second, the Saraguros were named specifically. Importantly, this shows how the people of Saraguro resisted the Spaniards, and maintained their loyalty to the Inca, by combatting not only the Spanish interlopers, but their Cañari neighbors who supported the Spaniards. As described by Cieza de León (1987 [1553]), the Cañaris apparently had good reason to support these powerful newcomers after the cruel punishments that Atahuallpa exacted on them for supporting Huascar. Nonetheless, the level of support for the Inca cause shown by the Saraguros indicates that they were most likely loyal *mitmaqkuna*, if not Inca nobles or functionaries, or a combination, as there are no references to "Paltas" resisting the Spaniards in such a manner or having a beef against the Cañaris.

Though the dates are not very firm, it seems that Chaparra was probably in rebellion from the mid-1530's through most of the 1540's, if not beyond that, and that there was a concerted effort by the Spaniards to subdue those restless inhabitants. In

⁴⁴ Original text reads:

Ansimesmo traian guerra con una provincia llamada *Saraguros*, questá siete leguas y ocho desta tierra; la causa, por questos eran amigos despañoles, y ansí les dieron la obidiencia á los españoles, y estos *Saraguros* no, sinó que ántes mataban en celadas y en caminos muchos españoles, y daban guerra á estos y a *Canaribamba*, porque no sirviesen á los españoles (Arias Dávila 1892 [1582]:178).

an official document published by Anda Aguirre, Juan de Salinas Loyola deals with a complaint brought forth by "Martín Tepoc, indio natural de Saraguro" (Anda Aguirre 1980:130). This judicial document from 1578 suggests that if the natives of the Saraguro area were going to the governing authorities in Loja to settle their disputes, by that time they had become integrated into the Spanish colonial system.

Caillavet (1989:171) speculates that the fighting that broke out between native groups was a re-surfacing of pre-Inca hostilities that were caused by great demographic pressure. But with so little detail on these conflicts, it is impossible to say they were not a result of inter-ethnic tensions produced by Inca re-settlement practices and conflicting loyalties dating to the Inca war for succession between Huascar and Atahuallpa. Furthermore, there is little evidence in the ethnohistorical record to project that the pre-Inca conflicts were a result of population pressure, and Caillavet's example is the Cieza passage cited above that describes "many and very large villages" (Cieza de León 1984 [1553]:181, translation mine).⁴⁵ Certainly during the Spanish conquest, populations were declining, and at that time, population pressure would not have been a concern.

The Sacred Landscape

Finally, we have two more ethnohistorical accounts that may have a bearing on the ceremonial focus of the Saraguro region. Understanding what parts of the landscape were considered sacred or important to the natives in colonial times could reflect the emphasis of Inca rituals in the area, and may even give some insights as to the pre-Inca ceremonial landscape.

⁴⁵ See Footnote 30 for full text of original quote.

In the first item, Cristóbal de Albornoz, in his list from the end of sixteenth century of sacred places and things in the realm of the former Inca Empire, mentions in the province of los Paltas "Acacana, principal shrine of the Palta Indians, was some rocks on a mountain near the settlement of Cuxibamba on the royal road. It was their pacarisca (place of origin). This province has many others (shrines), as in the other provinces" (Albornoz 1967 [late sixteenth century]:32, translation mine).⁴⁶ Albornoz explicitly connects the mountain Acacana with the Paltas, which would put at least the southern part of Saraguro territory within the Palta realm. As the main huaca and pacarisca (or pacarina) of the Paltas, Acacana would have had a very prominent role in the ritual practices of the province. Unfortunately, there are no other known reports of it in relation to indigenous religion in the colonial period, likely due to Spanish efforts to wipe out the vestiges of the native ceremonial practices, and Albornoz's document was certainly part of that effort. The fact that Acacana was the only shrine mentioned by name out of what were supposed to be many again reflects its importance. The actual description as a group of rocks on top of a mountain suggests some sort of shrine erected on its summit, or a natural rock outcrop. Though Albornoz only supplied very general locational information there is little doubt that Albornoz's Acacana is the well-known prominent mountain named Acacana that is located in the Saraguro region.

In the second relevant work, an account from 1773, the Padre Bernardo Recio

⁴⁶ Original text reads:

Acacana, guaca prencipal de los indios paltas, eran unas piedras en un cerro junto al pueblo de Cuxibamba en el camino real. Era su pacarisca.

Tiene esta provincia otras muchas, como las demás provincias (Albornoz 1967 [late sixteenth century]:32).

describes ridding the Saraguro people of a superstition related to a nearby mountain:

[187] I remember with singular pleasure a large cross that was placed in a very steep and open mountain of Saraguro, a village that is located between Cuenca and Loja. After the very wearying placement of the cross, we were given great comfort, not only by the sight of the exalted timbers on that barbarous height, but much more by the fruit that they produced, which was the end of a superstition that had existed.

[188] From the top of that mountain descended, or came off, a spring or small stream that the Indians called *Cusi Yacu*, which means "water of happiness." There the Indians would come, according to their old pagan customs, to make their prophecies and predictions. Since seeing the cross there, they started to call the stream Agua Santa (Holy Water), and attributing to its virtues the results that were hoped for, the superstition was abolished, and they derived from this the veneration of that sign of well-being *Signum Salutis*. This was such a renowned feat that the priest there assured me later that the Commissioner of Loja had thanked God very much that this measure had stopped the many accusations, which, because of the superstition of the Indians, had created much trouble [Recio 1948 [1773]:347, translation mine, emphasis in original].⁴⁷

Unfortunately, Recio does not name which mountain was the subject of these "pagan practices," but from its description as being a steep mountain near Saraguro, the most likely candidate is Puglla, which is steep and open. In other words, it is a prominent mountain that stands out by itself, separate from other hills and ridges, and dominates

⁴⁷ Original text reads:

^[187] Acuérdome con gozo singular de una cruz grande que se colocó en un monte muy empinado y exento de *Saraguro*, pueblo que media entre Cuenca y Loja. Después de colocada con gran fatiga, nos sirvió de grande consuelo, no la vista del salutífero leño exaltado en aquella bárbara altura, sino mucho más el fruto que produjo, que fué el fin de una superstición que antes había.

^[188] De la cima de aquel monte descendía, o se desgajaba, una fuente o arroyuelo que llamaban los indios *cusi yacu*, que es decir *agua de la dicha*. Allá acudían los indios, por la antigua costumbre de la gentilidad, a hacer sus vaticinios y ejercer sus agüeros. Pues viendo ya allí la cruz, la empezaron a apellidar *agua santa*, y atribuyendo a su virtud los efectos que esperaban, se abolió la superstición, y se derivó a ellos la veneración a aquella señal de salud *Signum Salutis*. Fué esto una cosa tan sonada, que el cura de allí me aseguró después cómo el señor Comisario de Loja había dado muchas gracias a Dios de haber cesado con este medio las muchas delaciones, que, por la superstición de los indios, la daban mucho quehacer (Recio 1948 [1773]:347).

the basin. The Belotes (J. Belote and L. Belote 1994d:I-7) infer that the mountain featured in this passage is Puglla, though the description could also fit Acacana, except that it is farther away from the town. No stream named Cusi Yacu is located on modern topographic maps, and the name may have gone out of use with the placement of the cross, as Recio relates.

If Recio's mountain was actually Puglla, then the placement of a cross was not the only time that outsiders had an impact on the Saraguro natives by erecting something on its summit. The construction of television antennas on the top of Puglla in the late twentieth century was also a wide-ranging influence, and, as James Belote states, there is no "doubt this new erection on Puglla heralds the coming of a new ideological and material era in Saraguro as significant as that symbolized by the cross" (J. Belote 1984:117).

Whichever mountain was the subject of Recio's revels, this account shows that in the colonial period, the natives of the Saraguro area held ritual beliefs that centered on mountains and water, two common themes in Inca religion, and in that of cultures throughout the Andes. Unfortunately, whether the sacredness of this peak and its watercourse pre-dates the Inca occupation, was the result of Inca influence, or arose in the colonial period may never be known. Thus, it cannot be assumed that this was a carry-over from the pre-Inca period, whereas Acacana was directly connected to the Paltas. It is quite possible, given the emphasis on duality and paired sacred mountains in Andean belief systems, that these two peaks were both considered sacred from pre-Inca through post-Inca times. Furthermore, if the sacred landscape was conceived in the same manner as that of the Incas in Cuzco, where all mountains were sacred and their supernatural power varied according to their height (Rowe 1946:296), it is likely

that Puglla and Acacana were the most important among numerous sacred peaks in Saraguro territory.

SUMMARY OF ETHNOHISTORICAL INFORMATION

The picture of Saraguro thus developed may not be very detailed, yet it provides a framework within which to situate the archaeological data. In pre-Inca times, it seems the natives of Saraguro were affiliated with the so-called "Paltas," who inhabited much of the present-day province of Loja, as well as parts of El Oro and Zamora Chinchipe. The people referred to as Paltas by the Incas and Spaniards probably did not represent any sort of coherent ethnic, cultural, or political unity, but rather shared a territorial proximity and possibly the practice of cranial deformation. The mountain Acacana, near Saraguro, was a major *huaca* of the Paltas, and was their *pacarina*. Cerro Puglla may have been paired with Acacana as another sacred mountain in the beliefs of the inhabitants of the region.

The Inca army arrived under the command of Topa Inca during the reign of his father Pachacuti, probably around A.D. 1460. The various neighboring groups in the northern highlands of Peru and the southern highlands of Ecuador may have united to combat the common foe. Whatever the exact ethnic make-up of the confederation resisting Inca domination, they may have made a final stand around Saraguro. When at last they were defeated, the Incas dispersed many of the Paltas and their allies to other regions of the empire, and brought in *mitmaqkuna* to replace them. There is little doubt, though little documentation, that Saraguro was one of the places where *mitmaqkuna* were concentrated, and it is possible that in Saraguro they served as soldiers, perhaps stationed in fortified sites or at the Inca centers.

After the local inhabitants were defeated and relocated, the greater region was

organized according to the system of Inca decimal administration, and the Saraguro area was administered as part of the province of Hanan Cañar, perhaps for the purpose of making the numbers of tribute payers tally correctly. The main north-south Inca road ran through Saraguro, though there were other auxiliary roads running through the region. Along that main route through Saraguro, laborers may have dropped some cut stones sent from Cuzco and destined for Tomebamba. The Incas constructed at least one *tambo*, Tambo Blanco, near Saraguro, and probably others as well. The economic interests of the Incas in the greater region probably centered on agriculture, as well as the care of llamas and alpacas, but they also exploited gold in the mines of Zamora and possibly Zaruma, and invested in intensive coca production in the lower Jubones Valley.

After the Spanish invaders overthrew Atahuallpa, the province of the Paltas, and especially Saraguro, actively resisted Spanish domination. Saraguro, situated in the sub-province of Chaparra, served as a haven for at least one Inca noble, a daughter of Huayna Capac. The inhabitants of Saraguro ambushed and killed Spanish travellers along the former Inca road, and warred with their Cañari neighbors to the north, as the Cañaris were considered traitors to the Inca cause.

Finally, the ethnic situation of the territory administered by Loja during the sixteenth century was quite confused, because there were several sub-groups of "Paltas," such as Calvas and Carrochambas, as well as Cañaris in the Ambocas region, and *mitmaqkuna* probably spread throughout the region, but concentrated around Saraguro and the city of Loja. With the chaos and upheavals that began with the Inca civil war for succession, and continued through the early Spanish occupation, it is difficult to assess whether the ethnic landscape recorded ethnohistorically is a reliable reflection of the Inca or pre-Inca situation. Today, the only recognized

indigenous ethnic group in highland Loja are the Saraguros, who are believed to be descended from *mitmaqkuna*.

CHAPTER 5: PREHISTORY AND ARCHAEOLOGY IN ECUADOR, THE SOUTHERN HIGHLANDS, AND SARAGURO

Because relatively little archaeological work has been done in the Saraguro region, this chapter situates the archaeology of the area within the broader context of the southern highlands and of Ecuador in general. The treatment of Saraguro itself incorporates early descriptions from explorations in the nineteenth and early twentieth centuries to augment the more recent information.

ARCHAEOLOGY OF ECUADOR

The majority of published archaeological information from Ecuador has been focused on ceramic chronologies, subsistence strategies, and basic concerns of culture history, while excavations have centered on the larger and better-known sites. As a result, the archaeological understanding of Ecuador's past has not reached that of our knowledge for neighboring Peru, and subsequently, researchers have not concentrated on the reconstruction of sociopolitical organization and the evolution of complex societies, as has been common for Peru in the last couple of decades. Though general descriptions of the archaeology of the country were made by earlier writers such as Federico González Suárez (1890-1903), R. Vernau and Paul Rivet (1912), and Jacinto Jijón y Caamaño (1945), there had not been enough field work done to make an effective overall synthesis of the country's prehistory until the publication of Betty Meggers' *Ecuador* (1966). More recent summaries have been produced by Aurelio Bravomalo (1992), Karl Dieter Gartelmann (1986), Pedro Porras (1987), and Enrique Ayala Mora (1988), but none have yet approached the level of integration of data and interpretation that is possible for Peru.

As it currently stands, the chronological framework developed for Ecuadorean prehistory (Figure 5-1) is divided into five major periods: the Preceramic, the Formative, the Regional Development Period, the Integration Period, and the Inca Period. This system was developed by the 1960's by archaeologists working mainly on the coast, and presented in Meggers' (1966) synthesis. This general scheme has been widely used since that time. The phases were distinguished based on broad cultural, economic and sociopolitical similarities seen throughout Ecuador, unlike the Peruvian scheme where horizon styles were used to define wide-spread synchronic cultural phases, interspersed by regionally distinctive intermediate periods (e.g., Rowe 1962). Though Uhle (e.g., 1929) claimed to have recognized Mayoid and Tiahuanacoid horizons in Ecuador, evidence for any sort of "Mayoid" period has been discounted, and the materials pertaining to the "Tiahuanacoid" period are very scanty, and only relate to the southern highlands. Thus, Uhle's horizons are untenable as pan-Ecuadorean styles. In effect, most researchers these days do not entertain the notion of such horizons in Ecuadorean prehistory. As a result of the lack of sharp divisions in the material culture of the past, the general Ecuadorean phases are characterized by gradual societal evolution, as compared to the more abrupt developments seen in Peru, and are quite long, except for the Inca Period.

The Preceramic Period begins with the first appearance of human inhabitants in Ecuador. We can presume that by the time that any people had reached central or southern South America, they would also have been in Ecuador. Though dates for the earliest inhabitants of South America are still in debate, a date of ca. 13,000 years ago (11,000 B.C.) from Monte Verde in Chile (Dillehay 1989) can be used as a starting point for Preceramic cultures in the Andes. The oldest known Paleo-Indian site in Ecuador, the cave of Chobshi, near Cuenca, has been dated to 10,010 \pm 430 BP

	Ecuador	Azuay/Cañar	Saraguro	Loja	Peru
1500 AD	Inca Period	Inca Period	Inca Period	Inca Period	Late Horizon
1250 AD	Integration	Cashaloma	Late Saraguro		Late Intermediate Period
1000 AD	Period	Late Tacalzbapa	Early	Zarza Phase	Middle Horizon
750 AD		Tacaiznapa	Galaguio		
500 AD					Farly
250 AD	Regional Development Period	arrío y Tacalzhapa naullabamba	Río León/ Putushio	Regional Development Period	Intermediate Period
0					
250 BC		rro Na Ch			
500 BC		C C			Early Horizon
750 BC					
1000 BC	Late Formative		Uchucay	Catamavo	
1250 BC	T officiative				Initial
1500 BC					renou
1750 BC			Jubones		
2000 BC					
2250 BC					
2500 BC	Early Formative				Preceramic
2750 BC					
3000 BC					
3250 BC					
	Preceramic				
11,000+ BC					

Figure 5-1. General chronologies for Ecuador, Peru, and regional chronologies for the southern highland provinces of Ecuador.

(Reinoso 1970; Lynch and Pollock 1981). El Inga, located on the extinct volcano of Ilaló near Quito, has been dated to 9030±144 BP (Bell 1965). The fluted fishtail points found at El Inga are similar to those found elsewhere in South America (e.g., in Uruguay, Peru, Argentina, and Brazil) and up into Panama. The earliest inhabitants of Ecuador and the rest of the Andes are thought to have been generalized big game hunters, with a subsistence focus similar to that in North America. Other preceramic sites have been found in other environmental zones, such as Las Vegas along the coast, and Jondachi and Papallacta in the Oriente. Archaeological evidence is sparse throughout the Preceramic Period, and there is something of a gap in knowledge of more recent Preceramic peoples in Ecuador, especially in the highlands, up until the advent of the earliest Formative cultures. This intervening period could be considered an Archaic phase, where the settlers of different environmental zones became more specialized in their subsistence strategies, as well as more sedentary.

The appearance of the Valdivia culture in the coastal province of Guayas signaled the beginning of the Formative Period ca. 3,500-3,300 B.C., though there is evidence of an earlier ceramic occupation noted at the Valdivia site of Real Alto (Lathrap, Marcos, and Zeidler 1977:7). The Formative is characterized by pottery-making sedentary societies, with an agricultural focus in inland sites, and a marine focus along the coast. There are indications of intensive maize agriculture at the Valdivia site of Real Alto (Marcos, Lathrap and Zeidler 1976:5), and evidence of incipient complex sociopolitical organization have also been found at this site, where the population grew from an estimated 150 to 200 people (Damp 1984:582) to probably more than 1500 by the middle phase (Valdivia III) of occupation (Lathrap, Marcos and Zeidler 1977:8). Formal ritual organization was evident at Real Alto, with the construction of two ceremonial buildings on mounds within a central plaza

by the Valdivia III phase (Marcos 1978). Judging by the population and the ceremonial architecture, the village was probably organized at a simple chiefdom level (the term "chiefdom" is used here primarily as a reference to levels of political hierarchy), with political power intimately tied to the practice of rituals. It is presumed that such modes of organization were appearing in other Valdivian settlements, and probably elsewhere in Ecuador.

The Formative Period is often divided into early and late phases, where Valdivia is the most prominent, and best-known, culture in the early Formative. The Late Formative, beginning ca. 1800 B.C., signaled the arrival of more regional cultures on the coast, plus the first recognized Formative societies in the Sierra. The Chorrera culture probably had the most wide-spread influence, being found along much of the coast. In the highlands, Early Cerro Narrío is the most well-known widespread Formative culture, centered near the town of Cañar in the Southern Highlands. A Formative Period occupation has also been revealed in the southern half of the province of Loja (Guffroy 1983a, 1983b, 1987a).

The Regional Development Period, beginning ca. 500 B.C., is named for the overall perception of "differentiation in sociopolitical organization, florescence in art style, and elaboration in technology" (Meggers 1966:67). Ceramics reached their climax in artistry, as attested by the pottery of the Bahía, Jama-Coaque, and La Tolita cultures on the coast. The developments in ceramics and metalworking suggest increasing specialization in craft manufacturing during this period. Such specialization, alongside differentials in grave goods, indicate increased levels of social stratification, though evidence is lacking to determine to what degree these societies were organized. In most cases, there were probably at least two levels of political control, probably with hereditary positions of control. The general trend was

toward more social integration and hierarchy, and most societies probably could be fit into the category of simple to paramount chiefdoms. Of course, there was variation in the level of organization, with the most complex societies, such as La Tolita, which was approaching a state level of organization, being located along the coast. More recent studies are beginning to examine site size hierarchies, which is one of the best indicators of the degree of centrality in political organization, and the lack of largescale excavations and analysis of the collections at the major sites of the period has further hampered studies of sociopolitical complexity in Ecuador.

The Integration Period, beginning ca. A.D. 500, is marked by the elaboration of the developments of the preceding period, with a slow transition rather than abrupt change in material culture, societal organization and settlement patterns. Populations increased, habitation sites become larger and more numerous, social stratification increased, craft specialization intensified, and political organization became more complex. Though ethnohistorical accounts refer to ancient kingdoms, such as the "Kingdom of Quito," archaeological evidence does not support the existence of statelevel civilizations during the period. There is good evidence that warfare became pervasive for the first time in this phase, as shown by the appearance of mace heads and other weapons in the archaeological record, and with the construction of forts and defensible habitation sites. Societies probably formed and shifted alliances among themselves in response to changing conditions of hostilities. As a result, the ethnohistorical accounts refer to the many confederations and the united efforts they put up against the invading Inca armies, but these were probably ephemeral alliances of military necessity and there were no permanent centrally organized systems for sociopolitical, religious, or economic control. Most societies were probably organized in complex chiefdoms, with alliances formed between neighboring

chiefdoms, wherein the paramount chiefs either shared military authority or ceded it to one chief.

The most elaborately organized societies may have been those organized around complexes of mounds, such as Cochasquí in the northern highlands, and the Milagro phase settlements of the Guayas Basin. The platform mounds at such sites represent the largest investment in public architecture in Ecuador, and could be evidence for incipient state formation, but whatever would have resulted from that trajectory was cut short by the arrival of the Incas, and soon after, the invasion of the Spaniards.

The Inca Period in Ecuador, according to the calculations of John Rowe (1946), would have begun in the 1460's, when Topa Inca, during the reign of his father Pachacuti, began conquests in the southern highlands of Ecuador. The first Inca acquisitions were made in the southernmost province, that of Loja, supposedly home to the Palta people. From there, the Incas conquered the Cañaris of Azuay and Cañar provinces, the Puruhaes of the Central Highlands, and finally the natives around and to the north of the Quito area. The Incas encountered varying levels of resistance in subjugating these Ecuadorean groups, and the chronicles are somewhat conflicting in their accounts. But the Incas apparently had the most trouble conquering the highlands north of Quito, where campaigns were conducted through the reign of Huayna Capac with only slow progress. The area around Quito was eventually conquered, but the situation remained unstable, and Inca control over that region was never consolidated to the same extent as provinces closer to the heart of Tawantinsuyu (e.g., Plaza S. 1976:121; Salomon 1986a:143-158). In fact, remains of Inca structures are rare around Quito, and the most common Inca installations in the surrounding area were forts. The coast of Ecuador was never brought under the

control of the Incas, though there are accounts of Inca expeditions made toward that end (e.g., Cieza de León 1984 [1553]:169-171), and there was an Inca presence on the island of Puná. Nonetheless, the subjects of Tawantinsuyu were certainly in contact with the inhabitants of the Ecuadorean coast, most importantly through the trade of *Spondylus* shell, which was ritually important to the Incas and other Andean societies. There was much less interaction between the Incas and the inhabitants of the Oriente, where, as in Peru, the combination of the rain forest environment and the low level of societal organization did not make conquest desirable.

The Ecuadorean holdings of the Incas lay in the Chinchaysuyu quarter of Tawantinsuyu, but were often referred to collectively as Quito, or the realm of Quito. In those areas, the Incas consolidated their control by erecting numerous installations, imposing their administrative systems, and improving the infrastructure. The site of Tomebamba, built where the modern city of Cuenca now stands, was highly favored by Topa Inca and his successor Huayna Capac. The city became second in importance after only Cuzco in the entire realm of the Incas, and its size and opulence were often noted by the chroniclers, such as Cieza de León (1984 [1553]:143-149). Unfortunately, it was destroyed by Atahuallpa's forces during the civil war for succession, as part of the punishment of the Cañaris for siding with Atahuallpa's brother Huascar. The local cultures in highland Ecuador were effected in many ways, as the local leaders lost their sovereignty, the people were burdened with labor obligations, and certain aspects of Inca culture, notably the Quichua language, were imposed upon them. The greatest changes probably resulted from Inca-mandated resettlements, with *mitmaqkuna* brought into probably every region, and many natives sent out to serve elsewhere. As noted in Chapter 3, ethnic Cañaris were sent out to serve in so many different regions of Tawantinsuyu that the composition of their

native society in Ecuador must have been profoundly altered.

Overall, the role the Ecuadorean highlands played in Inca history was quite out of proportion to the size of that territory, as the eleventh Inca Huayna Capac spent much of his rule on conquests in the northern highlands and died in Ecuador, Tomebamba attained high status within the empire, and finally, the region played a pivotal role during the Inca war for succession between Atahuallpa and Huascar.

ARCHAEOLOGY OF THE SOUTHERN HIGHLANDS: LOJA, AZUAY, AND CAÑAR

For the southern highlands of Ecuador, archaeological research has been heavily weighted toward the Cañari territory of the provinces of Azuay and Cañar, thanks to the presence of important sites such as Tomebamba and Ingapirca, and the location of the major city of Cuenca in the middle of the region. On the other hand, the province of Loja, supposed home of the "Paltas" has received much less attention. Nonetheless, an understanding of the prehistory of those regions is crucial in interpreting the archaeological and ethnohistorical data from Saraguro.

Cañari Territory: Azuay and Cañar

Ingapirca, near the town of Cañar, is the most studied site in Cañari territory, having been visited and studied for centuries by scholars including von Humboldt (1878), Villavicencio (1858), and Rivet (Vernau and Rivet 1912). Investigations have continued there throughout the twentieth century (e.g., Alcina Franch 1978; Escalera and Barriuso 1978; Fresco 1984a; Fresco and Cobo 1978; Jaramillo 1976; Meyers and Cueva 1986-1987; Ziolkowski and Sadowski 1984). The most comprehensive report of the archaeology of the site has been produced by Antonio Fresco (1984b) through

the work of the Spanish archaeological mission. These endeavors have shown Ingapirca to have been a major Cañari political and religious center for centuries before the arrival of the Incas. During the Inca occupation, an unusual oval-shaped structure was erected of fancy Inca cut-stone architecture; this structure was undoubtedly a major ceremonial building, built on top of a large rock outcrop that was an important Cañari *huaca*, possibly a *pacarina*. The construction of storage rooms, a stone-lined bath, and other buildings of fine stonework indicate that Ingapirca likely served administrative, ritual, and economic functions, along with providing amenities for Inca nobility.

Compared to Ingapirca, the site of Tomebamba was more important in the Inca scheme of things, but has been rendered a much less spectacular archaeological attraction. The remains of Tomebamba were originally studied by Uhle (1923), and investigations have continued there under the direction of the Museo del Banco Central, which has buildings on top of the site. Tomebamba was the Inca provincial capital for southern Ecuador, and, as mentioned above, was considered second only to Cuzco in importance in Tawantinsuyu. With its destruction at the hand of Atahuallpa and the subsequent founding of the Spanish city of Cuenca on top of it, the exact location of Tomebamba was eventually forgotten, and became the subject of later scholarly debate (e.g., González Suárez 1890-1903; Vernau and Rivet 1912). Uhle (1923) seems to have settled the issue with his excavations in the 1920s. Tomebamba has also been treated ethnohistorically (e.g., Matovelle 1921). Idrovo (2000) has recently published a volume presenting the results of excavations by the Museo del Banco Central, synthesizing much of the previous work regarding Tomebamba, and situating it all within what is known of the prehistory of the southern highlands in Ecuador.

Other major Inca sites in Cañari territory have been described by Rivet (Vernau and Rivet 1912) and Uhle (1923), among others. In the last few decades, much of the route of the main Inca road through the region has been investigated and is described by Fresco (1983) and Hyslop (1984).

Sharing the spotlight with the major Inca sites is Cerro Narrío, a large, heavily looted mound near the town of Cañar. The most notable archaeological excavations there were undertaken by Collier and Murra (1943), and since then this site has served as the type site for southern highland ceramic styles from the Formative Period. Cerro Narrío also contained local and imported ceramics from most other time periods up to and including the Inca occupation.

Local sites in the Chordeleg area to the northeast of Cuenca have also attracted attention, and several archaeologists have described burial goods from there (Uhle 1921, 1922; Vernau and Rivet 1912). The richness of those pre-Inca tombs is wellknown, having been discussed in print since the nineteenth century (e.g., González Suárez 1890-1903), and some of them are said to have contained many finely worked gold artifacts. Unfortunately, those graves were heavily looted for many decades, and little is known of their contents or contexts other than some limited excavations and looted artifacts.

As for other investigations of local prehistory, Collier and Murra (1943) recorded sites from various time periods during survey conducted in addition to their excavations at Cerro Narrío. Wendell Bennett (1946) also conducted survey and excavations, recording seventeen sites in the province of Azuay, and one site in the province of Cañar. The ceramic data produced from his surface collections and excavations, along with the information published by Collier and Murra (1943), have served up to the present as major sources of published material on analyzed ceramics
from these two provinces. Excavations at the site of Pirincay (Bruhns et al. 1989; Hammond and Bruhns 1987), which dates to the Formative and Regional Development Periods and is located in the Paute area, have revealed a possible center of crystal bead manufacture, and evidence for the early use of camelids in the highlands of Ecuador. Additional work has been done on non-Inca sites (e.g., Reinoso 1969), but unfortunately most of that work has been sparsely and poorly published. Finally, ethnohistorical analyses have also been prominent among studies of Cañari territory (e.g., González Suárez 1878; Alcina Franch 1986; Idrovo 1988), but by their nature, their time depth is limited.

Unfortunately, the total of the research focused on the area has failed to produce a clear understanding of the ceramic sequence, especially in relation to the later periods of prehistory. Most scholars have utilized the designation Cerro Narrío for the earliest phases, based mostly on ceramics from that site. Bennett (1946) proposed the Monjashuaico and Huancarchucu substyles of Narrío wares, but few people have followed his lead. For the Regional Development Period, Chaullabamba is the designation sometimes used, having been proposed by Uhle and utilized by Meggers (1966). The Chordeleg tombs may fall into the end of that period, or the beginning of the Integration Period, which would be in accord with the discoveries there of a Wari-style ceramic vessel (Bamps 1879:Planche 4, Figure 7), and a plaque with Wari-related iconography (González Suárez 1969 [1890-1903]:Lámina IIa, Figura 1a), both presumably from burials contexts.

For the Integration Period, most researchers use the terms Cashaloma and Tacalzhapa to describe the ceramics, but there is a confusing array of usage of these terms in relation to their range in time and space. Cashaloma ceramics are often held to be contemporary with Inca styles, with Tacalzhapa being pre-Inca, but in other

cases, the two styles are treated as contemporary. To complicate matters, there has been a late ceramic phase defined for Cerro Narrío. Fresco (1984b:183-187) has presented a coherent assessment of the ceramic chronology through the study of the ceramics of Ingapirca. He concluded that Cashaloma represents a late fusion of varying earlier styles, carrying over into the Inca Period, while Tacalzhapa was limited to the earlier part of the Integration Period. Of course, this sequence may only hold for the Ingapirca area, with other areas exhibiting other configurations. It is also possible that the two styles were contemporary sub-styles of Cañari ceramics, Cashaloma representing the fancier elite and ceremonial wares, and Tacalzhapa the utilitarian style.

More recently, Meyers (1998) and Idrovo (2000) have addressed the Integration Period ceramics, both agreeing in broad terms with some of Fresco's main points. Meyers presented a four phase chronology for Tacalzhapa wares, but placed the first three phases in the Regional Development Period, leaving the final phase and the Cashaloma style to span the whole of the Integration Period. Idrovo proposes only three phases for Tacalzhapa, but as in Meyers' scheme, the last phase dates to the Integration Period, followed by Cashaloma. However, Idrovo perceives Tacalzhapa III (ca. A.D. 500 to ca. A.D.1200) lasting notably longer than Meyers' Tacalzhapa IV (ca. A.D. 500 to ca. A.D. 900), with a corresponding truncation of the Cashaloma phase. I have chosen to utilize Idrovo's chronology to correlate with the Saraguro results, with the caveat that there may still be some issues to be resolved.

As for cultural developments, little work has been done to synthesize the prehistory of the region, with the recent exception of Idrovo's (2000) work on Tomebamba, but it seems to correlate with the major trends outlined for much of the rest of the country. There were early developments in the Formative Period, with a

major focus, probably ceremonial and political, at Cerro Narrío. After the initial burst, the momentum of development slowed down through the succeeding periods, when, at the arrival of the Incas, the Cañari people were probably organized under several competing chiefs, warring with neighboring chiefdoms, and shifting alliances with other chiefs as circumstances changed. Despite intense fighting, subjection to transplantation and retaliation for rebellions and siding with Huascar, the Cañaris are still a thriving ethnic group, and continue to inhabit much of their original territory in Azuay and Cañar provinces.

Palta Territory: Loja

The archaeology of the province of Loja, presumed to have been the territory of the "Paltas," has been given much less emphasis than that of Azuay and Cañar. Outside of the Saraguro sector (discussed in the following section) early archaeological accounts of the province are rare, other than brief mentions of the ceramics by such as Vernau and Rivet (1912) and Uhle (1929). Uhle did conduct some excavations at the cemetery of La Cuadra, where he reported "Tiahuanacoid" artifacts (Jijón y Caamaño 1945:212-214), but few other details are available. Presumably, he visited or conducted excavations at other non-Inca sites, but never published details of his findings. It was not until Collier and Murra (1943:33-34) visited the sites of Trapachillo and Valle Hermosa that any substantial information was published about pre-Inca sites and artifacts of the region. Jijón y Caamaño also published a short description and illustrations of ceramics from the province (1945:229-232), but for the next several decades, little else was done. Most of the earlier discussions of Loja prehistory centered on the presumed Amazonian origin of the Palta peoples, or framed the cultural history in terms of that assumption (e.g.,

Vernau and Rivet 1912:37; Jijón y Caamaño 1945:229-232), even though such speculation was based on very sparse ethnohistorical and linguistic evidence.

However, the labors of the French Misión Arqueológica Loja have begun to make up for that dearth of investigation. The results of that work have been widely published in Spanish (Guffroy 1980, 1983a, 1983b, 1983c, 1989; Lecoq 1983; Almeida 1983) and French (Guffroy, editor, 1987). Though still preliminary in many aspects and redundant in content, these reports have managed to provide a framework for future investigations in central and southern Loja, with data that span the whole of ceramic-using prehispanic cultures. Because the work has not been oriented toward famous sites (it could be said that there are none), our picture of the basic culture history for the region, though not very in-depth, more evenly covers the different time periods than is the case for Cañari territory.

Formative sites have been found in the Catamayo Valley, to the west of the city of Loja (Guffroy 1980, 1983a, 1983b, 1987a, 1987b, 1989), from which a fourphase ceramic chronology, spanning Catamayo A-D, has been produced. Settlements were more wide-spread in the Regional Development Period, having been found in the regions of Catacocha and Cariamanga, in addition to Catamayo (Guffroy 1980; Lecoq 1983, 1987). For the Integration Period, sites were even more widely spread, being located in the areas around Catamayo, Catacocha, Cariamanga, Vilcabamba (Almeida 1983, 1987; Guffroy 1980), and in the region of Macará, where several tombs were excavated (Guffroy 1983c, 1987c). Almeida (1987:280-282) designates this period the Zarza Phase. So far, little is known of Inca sites in the province south of Saraguro and San Lucas, and even though Inca ceramics have found their way into a number of local collections, it has not been possible to determine the impact of Inca domination on the central part of Loja (Guffroy 1987c:312). The French project has

not revealed any Inca installations, but tombs from the Macará area have yielded Chimú, Cañari, and Cajamarca pieces (Guffroy 1987c), which could be evidence either of long-distance contacts in late prehistory, or the results of Inca resettlement practices (see Chapter 2 for a discussion of this case).

The regions studied by the French mission are rather low-lying, and those societies and their cultures were probably connected more closely to those of the neighboring inhabitants of coastal Peru to the west than to those of the higher sierra zone of the north around Saraguro. Thus, the archaeology of central and southern Loja province may serve as a basis for comparison to the Saraguro region, but the ceramic typologies may not be directly applicable.

ARCHAEOLOGY OF SARAGURO

Likely due to its inaccessibility until recent decades, combined with the absence of impressive sites or artifacts, Saraguro has been the subject of little field work by those with an interest in archaeology. For the most part, reports on archaeological sites and materials from the area have been rare and brief, but enough work has been done in the region in the last few decades to devise a basic cultural history and ceramic chronology.

Early Descriptions

The first people with a scientific bent to visit the area were nineteenth century explorer/scientists making expeditions to pursue investigations in multiple fields, such as geography, botany, and zoology, as well as archaeology. From that period, several investigators published reports that include brief descriptions of major archaeological sites that they encountered while cruising through the highlands of

Ecuador. They usually attributed those sites to the Incas. Despite the brevity of the earliest reports, it is useful to consider them in light of information they may contain, and which may now be unobservable in the field because of erosion and destruction through the centuries. In particular, the state of Inca sites and roads may have declined significantly, with sites being stripped of their cut stones and plowed over for agriculture, and the roads suffering significant erosion through rainfall, pedestrian traffic, and construction.

Some of the first of these traveling scholars to journey through Saraguro were the Baron Alexander von Humboldt, and Francisco José de Caldas. Though von Humboldt traversed the *páramo* of Saraguro on his way south to Loja in 1802 (von Humboldt and Bonpland 1806:42), he never reported on any cultural resources of the area. Caldas, who went through the region in 1804, provided perhaps the first archaeological, rather than ethnohistorical, account of ruins near Saraguro:

On the 6th [of October], we advanced to the north as far as the sight of Nabón via a road different from the ordinary one. Here we saw many fragments of the ancient roads of the Incas, and two ruins, or in the language of the country, two ingapircas. From Cuenca to the south there are three roads from the time of those emperors: we have drawn them on our map. Here we collected some plants.

On the 7th, continuing our trip, we crossed the Río León, which on the map of Maldonado and de La Condamine is taken to be the mother river and source of the River Jubones. But both geographers are mistaken. The Río Zaraguro, larger without comparison, unites with the León to form the Jubones, and does not go to the river of Túmbez, as those observers thought...That same day, we traveled to Oña, between Nabón and Cochapata, and to Uduchapa. There are remains of two buildings of the Incas, almost entirely ruined...Near Oña exists a palace of the Incas, better preserved than the previous ones, similar in form to the one of Callo, which we measured and drew.

The 9th of October, we went on to Zaraguru. The river of Oña, which also flows into the León, is of the same volume as that of Uduchapa. Here is the division between the jurisdictions of Cuenca and Loja. There is afterwards a long and dangerous slope, which is called *Escalerillas*...There is another palace, which certainly was as magnificent as that of Callo, called *Villamarca*. Nothing remains except a prodigious number of stones, cut in perfect parallelepipeds, and a very long series of small rooms some distance from the center of the palace.

The river of Zaraguru is considerable, does not permit fording, and goes to join the León to the northwest of the town. It is to admire the thoughtlessness of de la Condamine in assuming it went to Zaruma and to Túmbez. Zaraguru is a very sizable town, and perhaps the largest of the Corregimiento of Loja; it is quite high. Located at the beginning of the forest, it is the port and stopping place for all of those who travel to Perú: its name comes from *zara* (corn) and *muro* (grain). See Garcilaso.

The clouds did not permit me to determine its latitude. Its elliptical houses. Its quinine...On the 11th, I passed through las Juntas, which is another *ingapirca* [Caldas 1912:201-203, translation mine, emphasis in original].¹

Caldas provided some useful information pertaining to the archaeological evidence of

El 7 continuando nuestro viaje, pasámos el río León, que en la carta de Maldonado y de La Condamine pasa por el río madre y origen del de los Jubones. Pero ambos geógrafos se engañaron. El río Zaraguro, mayor sin comparación, se reune al León para formar los Jubones, y no va al de Túmbez, como pensaron aquellos observadores...El mismo 7 pasámos á Oña, entre Nabón y Cochapata, y á Uduchapa. Hay dos restos de edificios de los incas, casi enteramente arruinados...Cerca de Oña existe un palacio de los incas, mejor conservado que los anteriores, semejante en la forma al de Callo, que medímos y diseñámos.

El 9 de Octubre pasámos á Zaraguru. El río de Oña, que también entra en León, es de caudal del de Uduchapa. Aquí se dividen las jurisdicciones de Cuenca y Loja. Hay después una larga y peligrosa subida, que llaman *Escalerillas*...Hay Otro palacio, que seguramente fue tan suntuoso como el de Callo, llamado *Villamarca*. No queda sino un número prodigioso de piedras, cortadas en paralelepípedos perfectos, y una serie muy larga de pequeños cuartos algo distantes del centro del palacio.

El río de Zaraguru es considerable, no da vado y va á reunirse al de León al noroeste del pueblo. Es de admirar la ligereza de de La Condamine en hacerlo ir á Zaruma y á Túmbez. Zaraguru es un pueblo bien considerable, y tal vez el mayor del Corregimiento de Loja; es bastante elevado. Colocado al principio de la montaña, es el puerto y la escala indispensable para todos los que viajan al Perú: su nombre viene de *zara* (maiz) y *muro* (grano). Véase Garcilaso.

Las nubes no me permitieron determinar su latitud. Sus casas elípticas. Su chinchona...El 11 pasé á las Juntas, que es otro *inga-pirca* [Caldas 1912:201-203].

¹Original text reads:

El 6 avanzámos al Norte hasta la vista de Nabón por un camino diferente del común. Aquí vimos muchos trozos de los antiguos caminos de los incas, y dos ruinas, ó en idioma del país, dos inga-pircas. De Cuenca hacia el Sur hay tres caminos del tiempo de aquellos Emperadores: los tenemos diseñados sobre nuestra carta. Aquí recogimos algunas plantas.

the Inca occupation of Saraguro: that there were three Inca roads leading south from Cuenca, that there was one Inca ruin, known as Villamarca, located somewhere south of Oña towards Saraguro, and that south of Saraguro, there were more Inca ruins near Las Juntas. The ruins of Villamarca consisted at least partially of fancy cut stone Inca architecture, and the small rooms described were quite likely a series of *collcas*. The Ingapirca Caldas mentions at Las Juntas probably lies in the region of that name to the south of San Lucas, though he could be referring to any ruins with architecture, as the term *ingapirca* simply means "Inca wall."

A few decades later, in the mid-nineteenth century, Manuel Villavicencio included the ruins of Tambo Blanco in his *Geografía de la Republica del Ecuador*:

Santiago - Small little town that has attached to it the village of San Lucas situated on the flanks of the *nudo* of Acayana [Acacana]. In its jurisdiction are found the ruins of *Tamboblanco* and one can see only the remains of a magnificent palace and many tombs of ancient Indians. It appears that it was a lodging of the Inca in his travels in the cordillera. One can also see ruins of other buildings. Excavations made in the tombs do not offer more than old ceramic pots without any findings of metal [Villavicencio 1858:445-446, translation mine, emphasis in original].²

Here Tambo Blanco is described for the first time with any level of detail. The site is characterized as a palace and *tambo*, and notably, tombs at the site had already been dug by the mid-nineteenth century. There is little doubt that this Tambo Blanco is the same one visited by Cieza de León (1984 [1553]:180) in 1547.

The site of Villamarca makes another appearance in the 1886 history of

² Original text reads:

Santiago. - Pequeño pueblecito que tiene por anejo al pueblo de San Lucas situado á las faldas del nudo de Acayana. En su jurisdiccion se halla las ruinas de *Tamboblanco* i solo se mira los restos de un suntuoso palacio i muchos sepulcros de los indios antiguos. Parece que fué una posada del Inca en sus viajes por la cordillera. Se ve tambien como ruinas de otros edificios. Las escavaciones hechas en los sepulcros no ofrecen mas que trastos de barro sin ninguna halaja de metal [Villavicencio 1858:445-446].

Ecuador by the historian Pedro Fermín Cevallos: "In the neighborhood of Saraguro are found the remains of the palace called Villamarca, which was sumptuous, according to the tradition, in the time of the Indians" (Cevallos 1986 [1886]:270-271, translation mine).³ Cevallos does not provide any useful detail that was not mentioned by Caldas, other than placing Villamarca closer to Saraguro.

A few years later, the historian Federico González Suárez in his Historia

General de la Republica del Ecuador, originally published 1890-1903, offered a short

description of Inca ruins in the vicinity of Paquishapa to the north of Saraguro:

The buildings of the first period are solely military forts, and tambos or lodgings for the sovereign or for his armies. There exist ruins of these buildings in the provinces of Loja and Cuenca. In that of Loja, in the region of Saraguro, on an eminence that dominates the plain in which is located the village of Paquizhapa, are found the remains of a building of the Incas, which, for the place where it is built and for the plan of its construction, has seemed to us that it should have been a fort, that which Túpac Yupanqui built, in order to carry out the conquest of the Cañaris [González Suárez 1969 [1890-1903]:676, translation mine].⁴

The ruins of Paquishapa may be the same as those of Villamarca, as there is a historic map dating to 1775 (Caillavet 1983:518-519) that shows "Villamarca" as a place name near the settlement of Paquishapa. However, there is an inconsistency in that Caldas mentions cut stones at Villamarca, while González Suárez characterized the

³Original text reads:

[&]quot;A las inmediaciones de Saraguro se hallan los vestigios del palacio llamado Villamarca que fue suntuoso, dice la tradición, en los tiempos indianos." (Cevallos 1986:270-271).

⁴Original text reads:

Los edificios del primer período son solamente fortalezas militares, y tambos ó casas de alojamiento para el soberano y para sus ejércitos. Existen ruinas de estos edificios en la provincia de Loja y en la de Cuenca.- En la de Loja, en la comarca de Saraguro, sobre una eminencia que domina la llanura en que está la población de Paquizhapa, se encuentran los restos de un edificio de los Incas; el cual, por el punto donde está edificado y por el plan de su construcción, nos ha parecido que debió ser una fortaleza, la que levantó Túpac-Yupanqui, para llevar á cabo la conquista de los Cañaris [González Suárez 1969[1890-1903]:676].

remains of Paquishapa as those of a fort; according to his definition:

All of these buildings are distinguished quite well by the character of their style, which we will say are very particular: none of them are constructed of worked stones, but with small stones, rough, without polish nor with any other working. They were, then, rather than monuments and palaces of luxury, military quarters, constructed in a short time, and with the end of carrying out the plans of conquest, in which the penultimate Inca was determined [González Suárez 1969[1890-1903]:677, translation mine].⁵

González Suárez was actually establishing a chronology of Inca ruins, basing the time of building on the type of structures and method of construction. The structures made of the basic *pirca* style described in the above passage were assumed to be older and thus date to the time of Topa Inca, the first Inca to enter Ecuador. Because much of highland Ecuador was conquered during his reign, it is not unreasonable to presume that sites constructed under Topa Inca were built for military ends. The sites with the fancy cut stone architecture were attributed to Huayna Capac, Topa Inca's successor, because they obviously required more labor and would have been erected once an area was securely incorporated into the empire. Whatever faults may be found in this simple typological scheme (e.g., palaces could have been erected under Topa Inca), it is perhaps the earliest attempt to chronologically order Inca sites in Ecuador.

In addition to the ruins of Paquishapa, González Suárez mentions ruins

located to the south of Saraguro, near Las Juntas:

Of the second period are presently preserved the ruins, now only the vestiges of two classes of buildings: the palaces of the sovereigns, and tambos and forts; the houses of lodging and the pucaráes. Still existing are the ruins of the

⁵ Original text reads:

Todos estos edificios se distinguen muy bien por caracteres de estilo, dirémoslo así, muy particulares: ninguno de ellos está construído de piedras labradas, sino de piedras pequeñas, toscas, sin pulimento ni labor ninguna. Eran, pues, éstos más bien que monumentos y palacios de lujo, cuarteles militares, construídos en corto tiempo, y con el fin de realizar los planes de conquista, en que andaba empeñado el penúltimo de los Incas [González Suárez 1969[1890-1903]:677].

palace of Callo, and of the palace of Cañar: there are vestiges of the palace of Caranqui, and of that of Mocha. There are visible the remains of the royal *tambos* of Las Juntas and of Oña: there are some indications of another tambo in the territory of Cuenca, between the villages of Deleg and Sidcay, and in some points are found the signs of ancient military forts of the time of the Incas.

The tambos do not exhibit any special features; for they are totally like those that Túpac Yupanqui ordered built. The forts are, likewise, very well-known; for the system of war and the tactics of the Peruvian monarchs has been excessively described by many historians [González Suárez 1969 [1890-1903]:677-678, translation mine].⁶

Presumably, the tambo at Las Juntas was the same site as mentioned by Caldas,

though with so little detail, it is hard to rule out the possibility that González Suárez

was referring instead to Tambo Blanco.

In the twentieth century, the French scholar Paul Rivet, in the oft-quoted tome,

Ethnographie Ancienne de l'Equateur (Vernau and Rivet 1912), published further

descriptions of archaeological sites in the Saraguro area:

The remains that are found in this province are very numerous, but consist primarily of tambos, fortresses or storehouses, rather than of temples or palaces.

...Also pointed out to us are a fortress to the north of Zaraguro, on the eminence of Paquizhapa, and, to the south of the same village, on the road leading to Loja, on the summit of the hill of Las Escalerillas, the ruins of Villamarca, of which there remained in 1804 only a prodigious number of

[°]Original text reads:

Del segundo período se conservan ya las ruinas, ya solamente las señales de dos clases de edificios: los palacios de los soberanos, y los tambos y las fortalezas; las casas de posada y los pucaráes. Existen todavía las ruinas del palacio de Callo, y del palacio de Cañar: hay vestigios del palacio de Caranqui, y del de Mocha.- Están visibles los restos de los tambos reales de Las Juntas y de Oña: hay algunos indicios de otro tambo en el territorio de Cuenca, entre los pueblos de Deleg y de Sidcay; y en algunos puntos se descubren las señales de antiguas fortalezas militares del tiempo de los Incas.

Los tambos no ofrecen particularidad ninguna; pues son en todo semejantes á los que mandó construír Túpac-Yupanqui. Las fortalezas son, asímismo, muy conocidas; pues el sistema de guerra y la táctica de los monarcas peruanos han sido prolijarmente descritos por muchos historiadores [González Suárez 1969[1890-1903]:677-678].

stones dressed as perfect parallelepipeds and a large number of small chambers a small distance from the center of the palace. It is highly probable that it is these *tambos* that Cieza de León describes under the name of *aposentos de las piedras*, which was made of stones carved with skill, and was located at the source of the rio Túmbez, with a number of ordinary storehouses existing close to them.

One hour to the east of the village of San Lucas, one encounters the ruins of Tamboblanco. In 1876, according to the information graciously communicated to us by M. Witt, one sees there more walls of 20m and more in length and of 1m 50 in height, made of blocks of well-polished granite, joined without mortar; and channels in stone that run just above the ground and end up in pits lined with regular stones. The greatest part of these materials have been used in the construction of houses in San Lucas. Close to the buildings, there have been discovered a large number of tombs that only contain pottery, to the total exclusion of any metal objects. More to the south, at the point called Las Juntas, there are other ruins in crude stones [Vernau and Rivet 1912:114, translation mine, emphasis in original].⁷

Rivet produced this description of sites by synthesizing information gleaned from

earlier sources, namely Caldas (1849), González Suárez (1890-1903), and

Villavicencio (1858), with the addition of some second-hand information from one

Original text reads:

Les restes qui se trouvent dans cette province sont très nombreux, mais se rapportent plutôt à des tambos, à des forteresses ou à des magasins, qu'à des temples ou à des palais.

^{...}Nous signalerons encore une forteresse au nord de Zaraguro, sur l'éminence de Paquizhapa (140, Atlas, p. 169), et, au sud du même village, sur le chemin qui mène à Loja, au sommet de la côte de Las Escalerillas, les ruines de Villamarca, dont il ne restait, en 1804, qu'un nombre prodigieux de pierres taillées en parallélipidèdes parfaits et un grand nombre de petites chambres un peu distantes du centre du palais (66, p. 503). Il est fort probable qu'il s'agit de ces *tambos* que Cieza de León décrit sous le nom de *aposentos de las piedras*, qui, faits de pierres taillées avec art, se trouvaient aux sources du rio Túmbez, et près desquelles existaient de nombreux magasins ordinaires (76, p. 409).

A une heure à l'est du village de San Lúcas, on recontre les ruines de Tamboblanco (76, p.410; 422, p.445). En 1876, d'après les renseignements qu'a bien voulu nous communiquer M.Witt, on y voyait encore des murs de 20m et plus de longueur et de 1m,50 de hauteur, faits de blocs de granit bien polis, unis sans mortier, des conduites en pierres qui couraient à fleur de terre et venaient aboutir à des fosses tapissées de pierres également. La plus grande partie de ces matériaux a été employée à la construction des maisons de San Lúcas. Près des édifices, on a découvert un grand nombre de tombes qui n'auraient renfermé que des poteries, à l'exclusion de tout objet de métal (422, p.446). Plus au Sud, au point dit *Las Juntas*, existaient d'autres ruines en pierres brutes (66 p.504; 140, Atlas, p.170) [Vernau and Rivet 1912:114].

Ernesto Witt. There is no indication that Rivet, or Vernau for that matter, had visited the sites described. The site of Villamarca at Paquishapa was treated as two separate sites, probably because they were originally described under different names by different authors. Furthermore, the placement of Villamarca and Las Escalerillas disagrees with that Caldas, with the French authors placing their location to the south of Saraguro, when Caldas had indicated that Las Escalerillas lay to the north, nearer the division between the provinces of Azuay and Loja. The information about Tambo Blanco provided by Witt is perhaps the only information in the passage that was not derived from the sources already cited above, and that new information reveals a large amount of cut stone architecture plus stone water drains at the site.

In-depth archaeological investigation around Saraguro began with Max Uhle's visit to the region in the early 1920s. In his published conference paper, *Ruinas de Tomebamba* (1923), Uhle discussed the Inca occupation of the southern highlands, and presented maps of a number of sites. First, Uhle described the routes of the Inca road system in the southern highlands between Cuenca and Loja:

Some seventy years after the entrance of the Incas into Ecuador, the province of the Cañaris was organized by them [the Incas] like few others in the empire. Three roads led, it seems, from south to north, converging in the region of Cuenca, to pass from there in various directions to the north and west. One rose along the river basin of the Río Piscobamba, to the west of Malacatos, along that of the Río Catamayo, in the direction of the Río Gonzabal, to las Juntas, to continue from there past the encampment of Tambo Blanco to the east of San Lucas, the mountain Acacana on its eastern flank, Paquizhapa, Oña, Uduzhapa, Dumapara, Nabón, Zhiña, etc. It appears that another road proceeded north along the cordillera to the east of the gorge of Malacatos, perhaps the same road that further to the north has left remnants in the cordillera to the east of Oña and close to Zhingata to the east of the hacienda El Paso. A third went to the region of Tumbes, passed the Río Tamalanecha or Jubones at las Minas, and following the river upwards, crossing the pass of Chaylla, went down the gorge of the Río León to the west of Oña to continue from there further to the north [Uhle 1923:4, translation mine].8

The first road listed was probably the main route, passing through the Saraguro region by way of Tambo Blanco, Acacana, and Paquishapa. The second road, lying to the east of Saraguro, is somewhat enigmatic, as it is unknown what Inca sites or settlements may have been found along that path. That route would have bordered the lowland forest. The third road, coming from the Tumbez drainage, was probably a highland-coastal connector road. Because Tumbez was the last major Inca installation on the coast in the north, this was probably an important route, the northernmost coastal-highland route entirely controlled by the Incas. The existence of three roads corresponds to the three noted by Caldas (1912:201) more than a century earlier, and supports the suggestion from the historical accounts of Zárate (1968 [1555]) and López de Gómara (1993 [1552]) that there were parallel north-south roads in that region (see Chapter 4). Uhle may have been drawing on information from Caldas, but considering the number of sites he visited in the provinces of Loja and Azuay, it is probable that Uhle did see with his own eyes traces of the prehispanic roads in a number of spots.

In another context, Uhle describes the ruins of specific Inca sites near Saraguro, including the sites at Paquishapa and Tambo Blanco. He produced two

⁸ Original text reads:

Unos setentas años después de la entrada de los Incas en el Ecuador, encontróse la provincia de los Cañares organizada por ellos como pocas en su imperio. Tres caminos conducían, al parecer, del Sur al Norte que se reunieron en la región de Cuenca, para pasar de allí en varias direcciones al Norte y Oeste. Uno subía por la hoya del río Piscobamba, al Oeste de Malacatos, por la del río Catamayo, la del río Gonzabal, a las Juntas, para seguir de allá por el campamento incaico de Tambo Blanco al Este de San Lucas, el cerro Acacana en su falda este, Paquizhapa, Oña, Uduzhapa, Dumapara, Nabón, Zhiña, etc. al Norte. Parece que otro seguía en la cordillera al Este de la quebrada de Malacatos al Norte, quizá el mismo que más al Norte ha dejado vestigios en la cordillera al Este de Oña y cerca de Zhingata al Este de la hacienda El Paso. Un tercero vino de la región de Tumbes, pasaba en las Minas el río Tamalanecha o Jubones, y siguiendo el río para arriba, y cruzando el paso de Chaylla, caía a la quebrada del río León al Oesete de Oña para seguir de allá más al Norte [Uhle 1923:4].

maps of Tambo Blanco, which he described in some detail:

These ruins, already mentioned by Pedro Cieza in chapter 57 of the first part of his Crónica del Perú, are the most important in the Province of Loja. Their old name has not been preserved. In the region they are commonly known by the name "La Ciudadela."

They are situated in the quebrada of Vinoyacu, at the foot of the mountain Acacana (ca. 4000 meters in elevation), in a small spur of this mountain between two streams, which join at the distance of some ten minutes to the south.

From the village of San Lucas, one league to the southeast, the Cerro Buco (also on a spur of Cerro Acacana) separates them, and in whose summit is a line of small Inca houses, used possibly as storehouses, or for lodgings for sentries, facing the ruins of Tambo Blanco. To the east are the ruins of the Cerro de Tambo Blanco, also of considerable height.

The ruins [of Tambo Blanco] consist of a palace, with two patios and a garden formed of tiers to the south; of a barracks formerly opened by seven doors in the front; and of a large construction, formed of two lines of rooms with a corridor in between them. One eccentricity of this last building is that none of the doors that open into the corridor corresponds to the one facing. The exact purpose of this of this building is unknown (for the lodging of women, provincial *mamaconas*, or others).

The three houses flank in irregular form a large patio situated in the middle.

It is curious that the ruins of Villamarca, located a half league to the north of Paquizhapa behind the hill Quihuil, repeats exactly the general plan of Tambo Blanco, with the only difference the placement of the third large building to the west, instead of the east.

The ruins of Tambo Blanco have served for twenty-five years as a quarry for the construction of the church of San Lucas. At the time of my visit the site of the palace was distinguished only by a system of large mounds of dirt. Through its excavation was determined the plan of the building in the form as shown in map No.6. In this manner were discovered the walls of the white stone of the region, very well worked, which with a height of more or less 1 meter had been erected on top of the original hard white soil, continued upwards with walls of adobes, in part yellow, in part black, sometimes in rows of alternating colors, up to more or less two meters above the soil. To the decomposition of the adobes that top the foundations of stone in this manner is credited the preservation of the ruin up until the time of this visit. The roofs of wood rested above cornices of rows of well-worked stones of more or less 80 by 30 by 8-10 cm each one. A great number of these were encountered in the excavations, but now are probably not found in place, because of the continuing depredation of the ruins for the use of the distant church.

Furthermore, one observes numerous cylinders of stone of more or less 70 to 80 cm long, with a cut in the middle part, apparently originally positioned in all of the corners of the rooms, with the purpose of holding down the roof. Identical items have been found in an Inca ruin of Joyaczhi, and also fragments of the same in the ruins of Tomebamba [Uhle 1923:11, translation mine].⁹

Las tres casas flanqueban en forma irregular un patio grande situado en el medio.

Es curioso que las ruinas de Villamarca, situadas a media legua al Norte de Paquinzhapa (sic) detrás del morro Quihuil, repiten exactamente el plano general de Tambo Blanco, con la única diferencia del aplazamiento del tercer edificio largo al Oeste, en lugar de Este.

Las ruinas de Tambo Blanco sirvieron hace unos 25 años de cantera en la construcción de la construcción de la iglesia de San Lucas. Al tiempo de mi visita el sitio del palacio se conoció solo por un sistema de montones altos de tierra. Por su excavación se determinó el plano del edificio en la forma como lo muestra el plano No. 6. Se descubrieron de esta manera los muros de la piedra blanca de la región, bastante bien labradas, que con la altura de más o menos 1 metro se habían erigido encima del suelo blanco y duro original, continuados hacia arriba por paredes de adobes, en parte amarillos, en parte negros, a veces en filas de color alternado, hasta más o menos dos metros sobre el suelo. A la descomposición de los adobes que taparon de esta manera los cimientos de piedra se debió la conservación de la ruina hasta el tiempo de visita. Los techos de madera descansaban sobre cornisas a filas de piedras bien labradas de más o menos 80 por 30 por 8-10 cm. cada una. Un gran número de

Original text reads:

Esta ruinas, mencionadas ya por Pedro Cieza en el capítulo 57 de la primera parte de su Crónica del Perú, son las más importantes de la Provincia de Loja. Su nombre antiguo no se ha conservado. En la región se conocen comúnmente sólo con el nombre de "La Ciudadela".

Están situadas en la quebrada de Vinoyacu, al pie del cerro Acacana (ca. de 4000 metros de altura), en un pequeño estribo de este cerro entre dos riachuelos, que se unen a la distancia de unos 10 minutos al Sur.

Del pueblo de San Lucas, a una legua al Sur-oeste, las separa el cerro Buco (también un estribo del cerro Acacana), en cuya cumbre una fila de casitas incaicas, usadas posiblemente como depósito, o como alojamiento de centinelas, da frente a las ruinas de Tambo Blanco. Al este tienen las ruinas el "cerro de Tambo Blanco," también de altura considerable.

Consisten las ruinas de un palacio, con dos patios y una huerta formada de varias gradas al Sur; de un cuartel abierto antes por siete puertas en el frente; y de una construcción larga, formada de dos filas de cuartos con un corredor intermedio. Una particularidad del último edificio, consiste en que ninguna puerta que daba al corredor correspondía con otra enfrente. Desconócese el destino exacto de este edificio (para el alojamiento de mujeres, mamaconas provinciales, u otro).

From Uhle's portrayal of the site, we see that the main feature of Tambo Blanco is the "palace," which is a large set of structures in a repeating pattern of rooms enclosing patios. The other major features are a "barracks," which is a long rectangular building of the type that is often referred to as a *kallanka*, and finally, a block of rooms, which may have housed *mamakuna*, the sequestered chosen women of the Inca. This account shows that Tambo Blanco served a range of functions, and was thus probably more than a basic *tambo* of the type that was intended mainly as a lodging place for travelers along the Inca roads.

Uhle's attentions in the Saraguro region were focused mostly on Tambo Blanco, and there is little question that this is the same site mentioned by Villavicencio (1858:445-446), and Vernau and Rivet (1912:114), and as Uhle stated, was probably the Tambo Blanco of Cieza de León (1984 [1553]:180). He did mention other significant remains at Paquishapa, Cerro Buco, and Cerro Tambo Blanco, but he did not publish any maps or detailed descriptions of those sites. Because Uhle describes Villamarca as near Paquishapa, there is little doubt that it is the same site referred to by earlier writers as both Paquishapa and Villamarca, and treated as two sites by Vernau and Rivet (1912:114). From Uhle's description, we should expect a configuration at Villamarca similar to that of Tambo Blanco. The rooms in a row on Cerro Buco are most likely *collcas*, which would have been associated with Tambo Blanco. Unfortunately, Uhle tantalized us by mentioning ruins on the Cerro de Tambo Blanco, but was not forthcoming with any details.

estas se encontró en las excavactiones, pero probablemente ya no se hallan en su sitio, por la continuación de la depredación de las ruinas para el uso de la iglesia distante.

Además se observaron numerosos rollos de piedra de más o menos 70 a 80 cm. de largo, con un destaje en su parte media, aparentemente en su origen plantados en todas las esquinas de los cuartos, con el fin de sujetar el techo. Iguales se han encontrado en una ruina incaica de Joyaczhi, y vestigios de los mismos también en las ruinas de Tomebamba [Uhle 1923:11].

In discussing Tomebamba, Uhle often compared the ruins there to those elsewhere in southern Ecuador. As to construction methods, he likened the "inferior" type of stone work in some parts of Tomebamba to that of the walls of the "palaces" of Tambo Blanco and Paquishapa, implying that all of the walls at those two sites are of the lower order of quality:

The front parts of the interior palaces are constructed of that beautiful masonry that we still admire in the oval of Ingapirca, as is shown in a section that has survived the continuing depredations that continue, even in Pumapungu itself, up to the present. As in all of the large constructions of the Incas, the type of stonework varied also in this palace and it is probable that some of the walls, especially of the rooms of the retinue of the Inca, were constructed according to the inferior type, as, for example, the walls of the palaces of Tambo Blanco, Paquizhapa and others [Uhle 1923:6, translation mine].¹⁰

This description is confusing in light of what Uhle encountered in the "palace" of

Tambo Blanco, namely, the "walls of the white stone of the region, very well worked" (Uhle 1923:11, translation mine). Even though the site had suffered much from being the source of stone for the San Lucas church, Uhle still managed to find finely worked stones through excavation.

Recent Archaeological Investigations

Uhle's (1929:33) brief mention of relations to ceramics of Ambato notwithstanding, it was not until the 1940s that the pre-Inca archaeological materials

¹⁰ Original text reads:

Las partes frontales de los palacios interiores estaban construidas de aquella hermosa albañilería que admiramos todavía en el óvalo de Ingapirca, como lo muestra un resto que ha sobrevivido a las derpredaciones, continuadas, aún en Pumapungu mismo, hasta el día. Como en todas las grandes construcciones de los Incas, el tipo de la albañilería variaba también en este palacio y es probable que varios de los muros, especialmente de los cuartos habitados por el séquito del Inca, estaban construídos según tipo inferior, como, por ejemplo, los muros de los palacios de Tambo Blanco, Paquinzhapa [sic] y ótros [Uhle 1923:6].

from Saraguro were mentioned in print. Most important is the report of Collier and Murra (1943), who passed through the Saraguro region as part of their wide-ranging survey that covered parts of the provinces of Azuay, Cañar and Loja, which supplemented their excavations at Cerro Narrío. They were probably the first to report on pre-Inca settlements of the area, having visited several sites outside the survey area of the project, but apparently still within the same cultural area. They described the state of knowledge of the region at the time:

Beyond the Jubones we continued our survey into Loja Province, which is virtually terra incognita archaeologically. Different occupations have been reported, particularly by Uhle, but these have not been substantiated by evidence. In pre-Incaic times, the Palta Indians, of Jivaro and therefore of presumed Arawak affiliation, occupied the area (Vernau and Rivet, 1912, pp.36-39, 113-115; Jijón, 1919b, pp.380-392). Certain ceramics, to be discussed below, have been identified with the Palta occupation. On the whole, however, information of archaeological nature about the group is minimal [Collier and Murra 1943:30-31].

Fortunately, their survey work began to address that dearth of information. They left us with a database of four sites in the Saraguro region, at locations near several different haciendas to the northwest of the town: Ayaloma and Llunlli near the Hacienda Carapali, Chilpas between the Haciendas Seucer and San José, and Guando, south of the Hacienda Uduzhí (Collier and Murra 1943:31-33).

According to those brief descriptions, the local sites seem to be characteristically located on slopes and summits of hills and ridges, sometimes with rock-faced terracing, at elevations from 2,700 to 3,400 m. The ceramics are "utilitarian and crude" (Collier and Murra 1943:32), and the most common forms are *compoteras*, bowls, tripod vessels, and wide-mouth jars. It is interesting to note that one of these sites, Chilpas, contained Inca ceramics along with remains of a multichambered Inca structure located on the summit of the ridge. This would suggest that this site, and others of its type, belonged to the later period of Ecuadorean prehistory, the Integration Period, and that there was some overlap between the people inhabiting that site and the arrival of the Incas.

Since the 1960s, the cultural anthropologists Linda and James Belote have been interested in the archaeology of Saraguro. The region's prehistory is directly connected to one of the issues they are concerned with, that of the ethnic identity and origins of the indigenous Saraguros. As a result, a consideration of archaeology (as well as ethnohistory) has been an integral part of their works. Although the Belotes have conducted neither systematic survey nor excavations, they have visited numerous sites and collected data on settlements and artifacts, integrating them with other works about southern Ecuador. This effort has resulted in the compilation of an outline of Saraguro culture history, a useful ceramic chronology and basic site typology (Belote 1984; J. Belote and L. Belote 1970, 1996).

In the greater region around Saraguro, the Belotes have found evidence of habitation from all of the ceramic periods of Ecuadorean prehistory, but within the inner highland area that was covered in this project, the evidence only indicated sites dating to the Integration and Inca periods (Belote 1984:91). Of the Inca sites in the area, the Belotes only describe the ruins at Ingapirca, Tambo Blanco, and the possible *collcas* at Milla (or Buco). James Belote states that "the region appears not to have been of great importance to the Incas" and there is "only scattered evidence of Inca influence of an archaeological nature" (Belote 1984:94). They have produced a map (J. Belote and L. Belote 1996:figures not enumerated) of the Ingapirca near San Lucas, which differs somewhat from that published by Antonio Fresco (1983:Figura 12, see below).

Another scholar with long-term interest in the archaeology of the region is

Mathilde Temme, who has been working in southern Azuay province and northern Loja province for the last 15 years or so. Unfortunately, results of her work are not widely available. Her best-known work is from the pre-ceramic site of Cubilán to the northeast of Saraguro (Temme 1982). In a report to the Instituto Nacional de Patrimonio Cultural (INPC), she discussed the known Inca sites between Oña and Saraguro (Temme 1981), and recently, she has been excavating the metal working site of Putushio near Tablón.

Also to the north of Saraguro, Carmichael et al. (1979) conducted survey and test excavations along the Río Jubones. Although their work was within the province of Azuay, the sites belonged within the same culture area as the pre-Inca Saraguro inhabitants. The published report is quite brief, but included at least one Formative Period site and another with occupation from the Formative through the twentieth century.

Most recently, Kevin Leonard, under the auspices of the Canadian Executive Service Organization (CESO), and the Centro de Difusión Cultural (CEDIC), a group of Loja residents interested in cultural matters, visited a number of sites with the aim of beginning a catalog of the archaeological sites of the province of Loja. In the Saraguro area, he visited Tambo Blanco, and did test excavations in a structure located on the hill Milla (a.k.a. Buco) "on a related site high above the <u>ciudadela</u> on the western slope of the valley" (Leonard 1993:10). Excavations were made within one of ten "casitas" on this site:

The walls of the <u>casita</u> we excavated...were formed with field stones set in red clay mortar. The surviving stone walls in the <u>ciudadela</u> of Tambo Blanco...are constructed the same way as the walls of the <u>casita</u>. The mortarless walls constructed of closely fitting blocks typical of the Cuzco-trained stonemasons, such as used in the construction of the Ingapirca site southeast of Cuenca, are markedly different and more sophisticated than the stonework in the walls of

the <u>ciudadela</u> of Tambo Blanco and the nearby hillside <u>casitas</u> which I was able to examine [Leonard 1993:10].

The "casitas" examined were undoubtedly the remains of Inca collcas that have been reported on Buco (J. Belote and L. Belote 1996; Temme 1981; Uhle 1923:11), a large hill to the west of Tambo Blanco.

In addition, Leonard visited Altar Mayor, an unusual site located 13-14 km to the north-northwest of Saraguro. The site exhibits circular architecture, which has not been noted elsewhere in the region. Altar Mayor is also located at a much lower elevation, ca. 1,600 m, than sites closer to Saraguro, and it is located within the *caliente* environment that characterizes much of the Río Jubones drainage. The drier climate has been favorable to preservation of textiles and wood; human skulls have also been recovered from the site. Unfortunately, no date or cultural affiliation has been assigned to the site, so it will remain an anomaly until future investigations can tie it into the rest of the region.

The path of the Inca road that runs through the Saraguro region has also attracted the interest of researchers (Caillavet 1989; Fresco 1983; Regal 1936), who have endeavored to retrace the road's route using ethnohistorical and archaeological information. The results have been mixed, lacking in detail, and have not actually identified any existing segment of Inca roadway within the Cantón of Saraguro. In effect, all of the efforts have involved connecting the dots of the known Inca sites around Saraguro, which serves as some sort of approximation, but still adds nothing to Uhle's description (1923:4, see above) of the path of the road. In fact, in some of the cases, the dots are incorrect, making the connections dubious. Regal (1936:78) makes the mistake of assuming the ruins of Villamarca and Paquishapa are separate sites. Strangely, he does not even mention the best known site, Tambo Blanco.

Caillavet (1989:168-170, 175) based her retracing of the main Inca road

exclusively on ethnohistorical data. As a result, she simply posits that it comes south from Oña, through Saraguro, Las Piedras, Tambo Blanco, and then on to Loja. The location of Cieza de León's Las Piedras is so far unidentified, and as discussed in Chapter 4, there is some doubt whether it was on the main north-south route. It certainly did not reside south of Saraguro, where Caillavet placed it.

In contrast, Fresco (1983:116-117, 122-123, Figura 1) utilized ethnohistory, toponyms, and archaeological reports, but relied most heavily on Uhle (1923). He inferred that the main Inca road passed through Villamarca, continuing south past the eastern flank of Acacana, past ruins called Ingapirca, and from there to Tambo Blanco. More usefully, Fresco tried to determine the probable routes of the secondary Inca roads. He speculated that the north-south road lying to the east might connect to the main route somewhere near Villamarca, and that another road may leave the main trunk somewhere to the north of Villamarca, heading to Cañaribamba, where routes lead north back to Cuenca, and west to Tumbez. In such a scenario, Villamarca would have served as an important cross-roads for traffic on the main north-south route and paths from the Oriente and the coast. Although Fresco collaborated with Hyslop in the ground survey of the Cañar-Azuay Inca road (Hyslop 1984:19-36), that field work stopped short of the province of Loja, so we do not benefit from that more meticulous work, and the exact routes of the Inca roads within Saraguro territory remain elusive.

Otherwise, no additional archaeologists have reported on investigations in the area, though a number have passed through Saraguro and visited Inca and pre-Inca sites. Nevertheless, the time may be approaching when archaeology will be common in the area, as there is a push among the natives to develop sites for tourism, open a museum, and to preserve and protect their cultural resources. Rising population and

the pressure on the natural resources of Saraguro are also encouraging the people to seek alternative sources of income, so more initiative may be taken to conduct work there in the near future.

Outline of the Prehistory of the Saraguro Region

Information from the above sources, especially Belote (1984), allows for a synopsis of the prehistory of the Saraguro region. The following is an outline of the basic culture history of the greater region around Saraguro, comprising the Saraguro Basin, the upper Jubones River drainage, the areas around San Lucas, Tablón and Oña, and adjacent *páramo* lands.

The only evidence of Preceramic Period occupation comes from Cubilán, about 17 km to the east-northeast of Saraguro. Temme (1982) investigated several sites there, located in the sub-*páramo* zone, at about 3,100 m elevation. The sites showed areas of lithic manufacture and possible encampments. The predominant artifacts were stone tools, made of a variety of chert and other siliceous stones, including some obsidian. The cultural remains from this site have been compared to those from Chobshi, near Cuenca, and are probably from the same cultural tradition. Temme also saw similarities between the Cubilán lithics and those from the Junín area of Peru. The subsistence focus of the Preceramic was on hunting and gathering, and may have been concentrated on the *páramo*, where game and plant resources would have been abundant and more accessible than in the forested zones (Belote 1984:88-90). No other Preceramic Period sites have been described for the greater Saraguro region, but the rock shelters that are fairly common in the area are likely to have been utilized during this period. But considering how rock shelters were frequently re-used, preceramic remains may be buried under many layers of other

cultural debris, and will not necessarily be recognized without excavations.

The Formative Period, which ushered in wholesale change to sedentary agriculturally-based societies in much of Ecuador, brought similar changes to the greater Saraguro region. The *páramo* ceased to be an important part of subsistence because it is unsuitable for agriculture. Later inhabitants of the Saraguro area probably used the *páramo* as an occasional hunting ground, but no evidence has yet surfaced for any habitation of the zone after the Preceramic. Evidence of Formative Period occupation seems restricted to the Jubones Valley, where settlements were mostly located in altitudes below 1,500 m (Belote 1984:90). The earliest ceramics from there show resemblances to Valdivia phase IV styles (Belote 1984:90), and the Belotes have designated the early Formative the Jubones Phase. Later Formative pottery in the Jubones Valley is more closely related to Cerro Narrío wares; this phase has been designated as the Uchucay Phase (Belote 1984:90). Presumably, the main crop was maize, which would have necessitated some level of irrigation in the dry Jubones environment. There is little to no data regarding sociopolitical organization or ceremonial emphasis in this period, but these societies may have been organized along lines similar to those elsewhere in southern Ecuador at the time, that is, smallscale chiefdoms.

During the next phase, the Regional Development Period, settlements continued to concentrate in the lower, drier main branches of the Jubones, at elevations below 2,000 m. In one such branch, the Río León, there are ceramics with resemblances to coastal styles such as Jambelí and Tejar (Belote 1984:90); this has been designated the Río León Phase (Belote 1984:90). Closer cultural connections with the people to the north are shown in the Putushio Phase, where the ceramics are similar to the thick ware styles of the Cuenca region as described by Bennett (1946),

and exhibit many of the characteristics of the pervasive ceramic techniques utilized during the Regional Development Period. It is unclear whether the Río León and Putushio ceramic styles were contemporary or successive. The subsistence focus during the Regional Development Period was probably similar to that of the Formative Period. As with the Formative Period, data regarding sociopolitical organization, economics, or ceremonialism are lacking.

It was not until the Integration Period that settlements appeared in the upper elevations, above the 2,000 m contour, and outside the central Jubones Valley. The settlement of the cooler, wetter, higher elevations would have required the expenditure of heavy labor to clear the thick vegetation. James Belote (1984:91) speculates that this shift in settlements was the result of an influx of new groups of people, who had different crops and agricultural techniques more suitable for the different climate. Whether the people were coming from the earlier settlements in the Jubones or from higher sierra environs, probably to the north, these new settlements represent an expansion into a zone that had been scarcely exploited in previous periods. The majority of the known settlements were placed in elevations above 2,700 m, along ridgetops, and the sites usually had terracing, some with rock facing. The terraces were probably used both for habitation and agriculture (Belote 1984:91). The Belotes have designated this the Saraguro Phase, with a tentative division into early and late sub-phases, based on ceramics and the nature of terracing (Belote 1984:91-93). It appears that the early sub-phase corresponds to the late Tacalzhapa phase (Tacalzhapa III, according to Idrovo 2000), which places it in time ca. A.D. 500 to ca. A.D. 1200, while the late Saraguro Period correlates with the Cashaloma phase, which dates from ca. A.D. 1200 to the beginning of the Inca Period, ca. A.D. 1460. Again, there is little known of the sociopolitical organization of the natives of the

region during the Integration Period, or of their economic or ceremonial endeavors.

The Inca Period probably began in the 1460s, when Topa Inca and his armies conquered the region during the reign of his father Pachacuti. The so-called Paltas may have made their last stand in the Saraguro area, but were nonetheless subjugated and resettled to other parts of the empire. The Incas constructed the sites of Tambo Blanco, near San Lucas, with *collcas* on the nearby hill of Milla, Ingapirca on a hill above Tambo Blanco, and Villamarca, near Paquishapa. The main Inca road passed through the region, with possible parallel routes to the east and west, and connector roads between them. Decimal administration was imposed, and the Saraguro region was tacked on to the administrative division of Hanan Cañar. *Mitmaqkuna* were placed in former "Palta" territory, most likely including Saraguro territory, which remained fiercely loyal to the Inca cause for a number of years after the arrival of the Spaniards.

Together, the Integration and Inca periods comprise the specific context for this project. The aim of the field work is to build on what is understood of the social, political, economic, religious, and other conditions prevailing in the Saraguro region at the end of the Integration Period, and to augment our comprehension of the nature of the Inca occupation. That information should allow for the evaluation of how local circumstances affected the Inca decision-making process in their conquest and consolidation of control over the area, and what role resettlement played in that process.

CHAPTER 6: ARCHAEOLOGICAL RESEARCH DESIGN AND FIELD METHODS

This chapter outlines the field implications for the archaeological investigation of state-mandated resettlement, especially as they relate to the Inca Empire, and describes the field methodology implemented to explore the topic in the Saraguro region of southern Ecuador.

ARCHAEOLOGICAL INVESTIGATION OF FORCED RESETTLEMENT

The archaeological examination of forced resettlement as a strategy of imperial expansion and maintenance requires three elements:

- identifying resettlement in the archaeological record
- assessing local conditions before imperial intrusion, and
- assessing the nature of imperial occupation.

These comprise the necessary components for assessing the costs and benefits of a given case of relocation and comparing them to the general practices of the empire in its methods of acquiring, controlling, and exploiting its territories.

The analysis of these points necessitates a regional perspective, i.e., a collection of data from a range of sites rather than a focus on a specific one. Settlement survey is thus the necessary first step for collecting archaeological data, which later can be supplemented by excavation at appropriate sites. With this in mind, the following discussion is primarily concerned with the types of data that can be obtained from surface survey, with the understanding that more variables can be addressed with the aid of excavation at later stages. As noted in previous chapters, ethnohistorical can also provide valuable information; available ethnohistorical information relevant to the current project was presented in Chapter 4. This chapter

will focus on archaeological methods, and will be integrated with the ethnohistorical data in the discussion in following chapters.

Identifying Resettlement in the Archaeological Record

Because forced relocation is fundamentally a form of migration, the task of identifying its occurrence archaeologically reduces to being able to detect changes in populations in the archaeological record. Archaeologists have faced this challenge for years, often with mixed results, yet have produced some useful guidelines that can be applied to the examination of state-mandated resettlement. However, they must be adapted to the distinct nature of relocation practices of early empires, and for this project, they can be further refined by taking into account the conditions pertaining in Andean prehistory in general and the Inca Empire in particular.

It is important to consider the number of ways in which forced resettlements in the Andes and elsewhere differed from the other kinds of large-scale migrations that we envision occurring in the past. First of all, the motivations for migration were not internal to the group but came instead from the priorities of the dominant imperial society. Second, the duration of the settlements depended closely upon the span of imperial control, which in the case of the Incas was less than 100 years. Many of the *mitmaqkuna* settlements did not persist after the fall of the Inca Empire, because many of those people either returned to their homeland, died of warfare or disease, or were relocated by the Spaniards. Third, many *mitmaqkuna* did not migrate as whole communities, but rather were re-assigned in smaller numbers, often according to their occupations. Finally, the *mitmaqkuna* projects usually did not involve the simple immigration of settlers from one ethnic group, but rather the establishment in a province of multiple communities representing many different groups from disparate

regions of the empire.

With those caveats in mind, a useful starting point for recognizing migrations may be the minimum conditions that Haury (1958) suggests:

A migration is the probable, though not the only, explanation in the archaeological record of past people:

1) if there suddenly appears in a cultural continuum a constellation of traits readily identifiable as new, and without local prototypes, and

2) if the products of the immigrant group not only reflect borrowed elements from the host group, but also, as a lingering effect, preserve unmistakable elements from their own people.

The probability that the phenomena outlined above do indeed represent a migration, rather than some other force that induces culture change, is increased:

1) if identification of an area is possible in which this constellation of traits was the normal pattern, and

2) if a rough time equivalency between the "at home" and the displaced expressions of the similar complexes can be established (Haury 1958:1).

On the whole, these conditions are straightforward, and the first point needs no modification to be applied to forced resettlements. However, the second needs to be modified to take into account the presence of a third material culture, that of the empire, and the state's possible manipulation of group identities and corresponding material goods. For instance, the Incas made their subjects preserve their ethnic identity and outward markers of that identity (Rowe 1982:111), which could have actively discouraged the borrowing of local elements by the immigrants, and strongly favored the preservation of elements of their own material culture. Because of the dynamics of imperial control, both local and immigrant groups may tend to borrow more from the culture of the dominant state rather than from each other. Furthermore, expansionist states may decimate the local population through warfare, total removal, or other punishments. This could also reduce the borrowing of traits of native culture, although for the sake of efficiency, colonists may re-use many of the material goods left behind by the former inhabitants.

Haury's first point signaling increased possibility of a migration, the identification of a possible place of origin for introduced traits, definitely applies to forced resettlement. Within the Inca Empire, ethnohistory has the potential to facilitate identifying the various lands of origin of *mitmaqkuna*. However, in many regions historical records are vague and of little use, and because the Incas often transplanted people from several different ethnic groups into a given province, it could be difficult to track down all of the places of origin of the groups represented. Matching the material culture of suspected colonists to that of their homeland in the Andes is also a formidable task because of the great expanse of the realm and because of a lack of detailed investigation of the late prehistoric material culture of many of the possible source communities.

The second point of increased probability, establishing rough contemporaneity of the intrusive material and that of the potential place of origin is also applicable to forced resettlement, and may not be too difficult to address in the Andes. Suspected *mitmaqkuna* settlements must date to the Inca Period (i.e., the Late Horizon in Peru), and the material culture of the suspected source group must date to that period or to that immediately preceding it (e.g., the late Integration Period in Ecuador or the Late Intermediate Period in Peru). While knowledge of late prehistoric material culture is not comprehensive in the Andes, it is often sufficient to narrow the date of occupation down to Inca or late pre-Inca times. The presence of Inca-style artifacts can obviously facilitate assigning an Inca Period date.

It is also worth distinguishing possible cases of forced migration from the two other major mechanisms that are utilized to explain discontinuities in the archaeological record: diffusion and local development. There is no reason to presume that these processes did not also occur within early empires like that of the Incas. For example, the large-scale movements of goods and people to serve imperial ends could have provided countless opportunities for different technology and artifact traits to diffuse from one location to another. On the other hand, the short duration of the empire, the Inca effort to preserve ethnic divisions, and the state domination of the political economy may have curtailed diffusion of technology and traits in the Andes. But in general, diffusion would tend to result in changes in fewer aspects of material culture than would migration, and so should be distinguished by the preservation of a very high proportion of local material culture. Furthermore, diffusion should produce some amount of overlap in time and space while new items or traits are phased in and old ones phased out, while migration would represent a much more sudden break between traits. In contrast, changes in material remains produced by local developments would have different implications. There may be antecedents in the local culture that could be used to trace the developments of styles, materials, practices, etc., and which should overlap in time and space. Local development should cause changes with fewer discontinuities and in fewer categories of traits or artifacts than would result from population replacement.

A third dynamic that can lead to changes in material culture is the influence of the imperial culture itself. On one hand, aspects of imperial culture may be voluntarily embraced by subject groups, as with imitations of status items or the adoption of new technology. On the other hand, the state may impose some level of acculturation, often with the aim of facilitating control, such that imperial language,

decorative styles, farming techniques, etc., may be spread over wide areas. Both of these processes were certainly at work in the Inca domain, where local ceramic traditions often imitated imperial wares, and the Incas introduced the Quichua language,¹ *quipus*, copper-tin bronze technology, rocker-mill style grinding stones, etc., within much of their realm. In general, changes resulting from the influence of the imperial culture may not be difficult to recognize: they should be widespread and involve a limited range of artifact types, with much of the local material culture persisting alongside.

Resettlement projects are likely to result in traces in the archaeological record that are distinguishable from these other phenomena. On the whole, groups who were relocated should have left evidence showing significant discontinuities in a number of categories of material remains, with many of those having no obvious predecessors in the local archaeological record. The differences should be localized, occurring within one or more, but not all sites within a province. The discontinuity in local versus immigrant material culture may be more marked with *mitmaqkuna* than in other types of migrations, as the people resettled by the Incas often were removed from provinces more than a thousand kilometers away (see Chapter 2).

Complicating the matter is the potential for re-use by colonists of local sites, structures, and artifacts. In the Andes, it appears that *mitmaqkuna* were sometimes settled in existing local habitation sites, but it is unclear how many possessions were actually left behind by the people removed by the Incas, the extent to which those items were re-utilized by the immigrants, and which ones were quickly replaced by

¹ Quichua may in fact have spread to some parts of the Andes before the expansion of the Inca state; see Mannheim (1991) for a discussion of the spread of Quichua and its history after the arrival of the Spaniards.

the foreign equivalent. Such information is scarce in the ethnohistorical documents. But we may assume that even if a group of *mitmaqkuna* were placed within local households where nothing of local manufacture had been removed, many items would have to be replaced eventually because of wear or breakage. Thus, unless the *mitmaqkuna* were perpetually supplied by the state or neighboring groups, the foreign elements of design and manufacture should have come into play.

The best general approach to identifying resettlement archaeologically is to look for changes in multiple types of archaeological data, as per Haury's criteria of an appearance of a new "constellation of traits" Haury (1958:1). Artifacts, settlement patterns, architecture, food remains, burial practices, and skeletal remains represent the main categories of data likely to provide relevant data. Other avenues of investigation, such as linguistic analysis, could produce supporting evidence, and may be particularly useful in some regions in the Andes.

It would be most helpful to have knowledge of markers such as ceramic styles or architectural features that are diagnostic of specific ethnic groups. Admittedly, the topic of the relation between ethnic or social groups and style in material culture is problematic (Shennan, editor 1989; Jones 1997). But with the analysis of forced resettlement, the focus is on groups being moved over a long-distance into new provinces, such that the culture of the incoming colonists is likely to be sufficiently distinct from that of the local inhabitants. The thorny issues are thus more pertinent to distinguishing groups who have been close neighbors over longer periods.

Altogether, the best approach to identifying the occurrence of forced resettlement archaeologically is a regional survey, with a focus on identifying changes in settlement patterns, artifacts, and architecture. Those types of data are the most accessible via survey, and have a good potential to reflect the influx of foreign groups. Given an Inca Period date, the following changes, as compared to the late preimperial data, might be expected indicators of *mitmaqkuna* settlements in the Andes.

Artifacts. In all likelihood, some subset of the material goods, such as personal adornments, cookware, or weapons, that *mitmaqkuna* brought with them or manufactured in their new homes, should be distinct from the same types of items made the natives of their assigned province. Thus, artifacts differing in decoration, style, type, material, and manufacturing technique from those of local equivalents may be indicators of *mitmaqkuna*. The best candidates are ceramics, chipped or ground stone, metal items, and other types of artifacts that preserve well in highland Andean environments. In some coastal regions, textiles and wooden objects that show distinctive changes may also be preserved. To be distinguished from the possible effects of trade, changes should be seen in a range of associated goods or be found in high numbers, rather than simply reflecting the influence of the material culture of neighboring groups or of the Inca state.

The most significant changes may be in ceramics, the finest of which often served as status goods, and have the potential to be ethnic markers in the Andes. In most of the archaeological cases of suspected Inca-imposed resettlement, limited ceramic data from either surface collection or cemetery contexts have formed the basis for inferring the presence of *mitmaqkuna*, with the occasional support of architectural evidence (see Chapter 2). Generally, those ceramic materials are of two varieties: imperial-related, or distinctly non-local in style, the latter sometimes identifiable to a specific place of origin. High amounts of imperial-related ceramics are correlated with some of these *mitmaqkuna* settlements, but unfortunately are not exclusive to them.

Some other categories of artifacts may show less variation due to their more

utilitarian nature. For example, manos and metates are often rather basic in manufacture and show no traits distinctive of their culture of origin. In the Andes, the more specialized rocker-mill form of grinding stone was spread through much of the Inca Empire, but its appearance in the archaeological record does not necessarily indicate the influx of colonists, as it is also likely to represent the local adoption of Inca technology.

There is the potential for some degradation in quality and craftsmanship of artifacts, as a result of Inca partitioning of labor assignments. Because potters, smiths and other craft specialists were often given separate, special labor assignments, some groups sent out as *mitmaqkuna* may not have included such specialists. If so, those *mitmaqkuna* must have relied on unskilled labor to produce needed items, or traded with the locals to gain access to items of acceptable quality. Thus, some *mitmaqkuna* groups may have used less distinct, lower quality goods than were available in their land of origin.

In addition, the specific objectives of relocation projects may have influenced the artifactual evidence. While projects initiated for pacification and control may not have had a distinct effect on artifact assemblages, economic projects may have resulted in higher numbers of occupation-specific artifacts, such as craft making and procurement tools. Resettlement with military objectives might be distinguished by high numbers of weapons, the types of which were often specific to different cultural groups in the Andes. Projects with religious or ideological goals may be suggested by higher numbers of ceremonial items and status goods.

Settlement Patterns. The arrival of *mitmaqkuna* in many cases may have brought about changes in the way people lived in and utilized the landscape, which may be reflected in changes in numbers, functions, locations, sizes and types of
settlements, as well as in inter- and intra-site spatial patterning. Impact may have been minimal in some cases where the Incas made *mitmaqkuna* re-occupy local settlements, although those sites may exhibit notable changes if they were expanded during re-occupation. Furthermore, *mitmaqkuna* who lived within imperial sites may have had little impact on settlement patterns.

The objectives of resettlement may have had a major impact on exactly how settlement patterns changed. In projects for pacification and control, re-occupation of local sites was likely, except for defensible sites, which may have been abandoned if the incoming settlers were not trustworthy. Economic objectives are likely to have resulted in the expansion of existing sites or the establishment of new ones concentrating on certain activities, such as procurement, processing, and manufacturing; areas within sites, such as workshops and storage, may reflect increased activities; agricultural intensification may be evident through terrace building and irrigation works. Military goals may be reflected in the establishment or re-use of fortified sites, defense works, control points, garrisons, etc., while religious or ideological objectives may be indicated by the establishment or enlargement of shrines, ceremonial centers, etc., and their supporting settlements.

Architecture. Elements of architectural remains may reflect the presence of *mitmaqkuna* through changes in floor plans, construction materials, style of construction, decorative elements, size of buildings, and numbers of rooms. At times, the colonists may have constructed buildings closely along the lines of those in their homelands, but the architecture of *mitmaqkuna* settlements may not necessarily be a strict reflection of their native styles and methods. First, the colonists may adopt local methods out of necessity to adapt to the climate and resources of a new environment. Second, architecture may be constructed with the labor of locals, colonists, or both,

with or without state supervision, so forts, public architecture, etc., may exhibit some combination of local, *mitmaqkuna* or imperial features. Finally, if the colonists were made to live in existing habitations, or if the local people were forced to build houses for them, they may have had minimal external impact on the architecture. If some claims of the ethnohistory are to be believed, then the locals would have constructed houses for the incoming group, at least at the time of first settlement; subsequent building may have been the responsibility of the *mitmaqkuna*. In any case, their utilization of space within those houses may be different, so that on the household scale, we may see changes in the use of domestic space for cooking, sleeping, craft making, etc.

The various objectives of resettlement could allow for different opportunities for *mitmaqkuna* to affect architecture, mainly based on the likelihood of construction of new sites and buildings, and how closely the projects are controlled by the empire. For relocation projects with the objectives of pacification and control, re-occupation of local sites is likely, except when the state forced abandonment of defensible sites in favor of new settlements. Economic projects, which were likely to be geared toward increased production, are likely to have resulted in new or expanded sites related to the specific economic focus of the endeavor. The empire may have exercised strict control over many such undertakings, in which case the related architecture may be mainly imperial in style. Military goals may have often required the establishment of new garrisons, defense works, etc., although some local fortifications may have been re-used. Because of the importance of these installations to the state, the new constructions were probably closely dictated by the state. Projects with religious or ideological aims were also likely to followed imperial styles, especially when establishing sites or buildings relating to the state religion or involving the expansion

and co-option of local shrines or ceremonial centers.

Determining Whether Local People Were Removed. Another aspect of identifying the occurrence of resettlement in the archaeological record is detecting when local inhabitants have been removed from their settlements. Essentially, this entails determining if sites that were occupied in late pre-imperial times were abandoned during imperial occupation. However, without evidence of where they were moved to, it can only be assumed that they were forced to move outside the province rather than consolidated locally into fewer settlements, or simply exterminated.

When local sites show substantial evidence of re-occupation by outsiders, abandonment by the previous inhabitants, at least in part if not in full, can be assumed. Otherwise, discerning abandonment may rest on negative evidence, i.e., the absence of artifacts dating to the imperial period, which may be problematic if local material culture did not change significantly in the short duration of imperial occupation or if the locals had access to few state goods. Evidence of destruction of settlements, such as widespread fire damage, can be suggestive, but may be hard to detect through survey, and does not necessarily rule out re-occupation by locals.

Evaluating Local Conditions in the Pre-Imperial Period

Understanding the pre-imperial occupation of the region provides the necessary baseline for distinguishing changes that may indicate the presence of *mitmaqkuna*, for identifying other changes made by the empire, and for evaluating the imperial strategy for the conquest and consolidation of the region. Settlement survey can provide the base data on settlement patterns, artifacts, and architecture, for assessing the following conditions.

Political Organization. The main goal is to assess the number of level in local political hierarchy, and whether the area was tightly organized under a regional center or more loosely arranged into smaller, independent groupings. These points can be examined through the differentiation of site types via variations in architecture and artifacts, the analysis of the distribution of settlement sizes and types, and their grouping within the landscape.

Economic Organization. The economic systems of most regions in the Andes, especially in the highlands, were agriculturally based with varying degrees of specialization in crafts or participation in trade networks. The main points to assess for characterizing the local economic system include:

- the level of agricultural intensification, as indicated by the presence of irrigation, terracing, or other improvements.
- other major economic emphases, such as mining, herding, fishing, and stone working, shown by special purpose sites or artifacts.
- the level of occupational specialization, especially in ceramics, metalworking, and other crafts, as seen through high qualities and quantities of certain goods, the presence of special purpose sites, or workshop areas within settlements.
- the level of trade and economic integration with other regions, as evidenced by the presence of exotic goods or raw materials.

Infrastructure. Elements of infrastructure, especially those that could have enhanced economic production and the facilitated the movement of people and goods, may be indicated by remains of roads, irrigation works, bridges, etc.

Military and Strategic Concerns. The level of preparedness for warfare can be indicated by sites with defensive features. For the Andes, the Topics state that the

clearest cases of defensive structures share the following features: "(1) parapeted walls, (2) slingstones, (3) moats outside the walls, and (4) defensive locations with restricted access" (Topic and Topic 1987:48). Stockpiles of other weapons, such as spears, axes, clubs, arrows, etc., could serve as additional indicators. Defensive facilities at strategic locales, especially protecting borders, indicates a level of local cooperation and concern for attack from outside groups rather than intra-regional conflict.

Detecting the actual occurrence of warfare may be more difficult. Military engagements typically represent short-term events that are likely to leave few remains because of the prevalence of battlefield scavenging, burial of war dead, and weapon recycling (T. Topic 1991:234). But even in the face of such practices, broken weapons and expended projectiles may remain behind. Certain weapons also served hunting and agricultural functions, and thus their presence alone or in low numbers does not signal their use in combat. Other indicators of warfare may include the burning of buildings, especially those in defensible settings. Finally, iconography may relate scenes of battles between different groups, but depictions on ceramics or other media may not be detailed enough to connect to specific events, and may instead represent general themes or mythological representations of warfare. On the whole, many of these indicators may be detectable through survey, and a combination of them would certainly reveal a concern with conflict, if not indicating the actual occurrence of warfare.

Religious and Ceremonial Organization. A centralized religious system is indicated by large ceremonial sites or the restriction of ceremonial structures to the larger settlements. Such buildings may have such features as large size, elaborate construction, prominent or central location, ritual-related artifacts, special

iconography on architecture and artifacts, or a lack of apparent domestic military, economic, or administrative function. A less centralized system would be suggested by a lack of large ceremonial centers, and the presence of religious/ceremonial structures in a number of smaller settlements. In the Andes, platforms and pyramidal mounds were common ritual structures, but in the late pre-Inca times, major ceremonial centers were less numerous than in previous eras.

Other ritually significant locales could include constructed shrines or notable features of the landscape, either of which might be indicated by the presence of the types of artifacts used for offerings. Within the Inca realm, mountains were very significant, as were bodies of water, caves, and large rocks or rock outcrops. Surface evidence may include constructed altars and remains of offerings, including *spondylus* shell and fine ceramics.

Evaluating the Imperial Occupation

The third component of analyzing forced relocation as a strategy of imperial expansion and maintenance is to understand the nature of the imperial presence in the region that was subjected to resettlement. This includes confirming the empire actually exercised control over the region, and evaluating how it conquered the territory, consolidated its control over the people, and exploited their labor and other resources.

Confirming Imperial Presence. One might assume that a territory enclosed within lands under imperial control would have also been subject to the empire, but known discontinuities in the boundaries of some empires do not make this a foregone conclusion. Thus, it is necessary to first establish whether or not a territory was actually under imperial control. The potential evidence will vary with the nature of

rule, with territorial strategies leaving much more visible marks upon the landscape than hegemonic ones. In fact, in locales where indirect rule was implemented, there may be few archaeological indicators. More conclusive are the presence of imperial administrative centers, outposts, forts, defense works, garrisons, roads, storehouses, etc., which reflect the more territorial strategies. The presence of imperial-style artifacts alone does not necessarily indicate subjugation, because their presence could be a result of trade or local imitation of foreign status goods.

In the Andes, Inca control in most regions is confirmed through historical documents. The major exceptions have been along the frontiers of Tawantinsuyu (e.g., Dillehay and Netherly, editors, 1988), where ethnohistorical data often have been unclear on the existence and nature of Inca control. The issue has been more problematic in the archaeological study of earlier empires for which we have no ethnohistorical information. Most notably, the expansion of the Wari state in the central Andes has been the center of much debate as to whether it was actually an empire, what signals a Wari presence, whether such a presence also signifies control by Wari, and if so, what was the nature of that control (e.g., Tello 1942; Larco 1948; Rowe 1963; Menzel 1964; Lumbreras 1974; Shady and Ruiz 1979; Shady 1989; Czwarno 1989; Schreiber 1992). Even in cases of significant Wari related architecture and artifacts, some researchers have been reluctant to posit outright imperial control, hypothesizing other types of relationships between polities (e.g., J. Topic's [1991] assessment of the Wari presence in Huamachuco in the northern highlands of Peru). Such evidence is seldom if ever questioned in the context of the Inca Empire, provided the region was within the known borders of Tawantinsuyu.

Acquisition of Province. To assess how a province was acquired by the empire involves distinguishing between military conquest and annexation through

diplomacy, with attention to the possibility of the use of some combination of the two approaches. Because successful diplomatic efforts may leave few archaeological traces, the task becomes one of looking for indications of native resistance, i.e., warfare. As discussed above, warfare can also be hard to detect archaeologically, especially when relying mainly on surface evidence. If indicators of warfare are present, they must be pinpointed rather precisely in time, e.g., via diagnostic artifacts of both local and imperial types, to be taken as evidence of military engagement during imperial conquest. Furthermore, clashes between imperial and local warriors could also have transpired during subsequent rebellions, the evidence of which might easily be misinterpreted as the initial battle of conquest. In any case, the absence of evidence of warfare cannot automatically be interpreted as indicating voluntary acquiescence on the part of the locals. In the end, the presence of defensive works is a readily visible indicator of a concern for warfare and the potential to resist conquest, if nothing else.

Later Resistance to Imperial Rule. Detecting later native uprisings may be difficult because, as noted above, they could be hard to distinguish from resistance to initial conquest. However, at the time of a rebellion the local people may have had no access to fortified sites, so evidence of combat with imperial forces in settlements or open spaces may suggest unrest. Likewise, damage to imperial installations may signal local rebellion. Such evidence may be present in the Andes, but similar damage may have resulted from the war for succession between the brothers Atahuallpa and Huascar and the conquest of the Incas by the Spaniards, both of which involved the participation of many native groups.

Political Organization. Indicators of the imperial strategy for re-organizing the political structure in a region focus on detecting changes in the number of levels in

the political hierarchy and the imposition of direct versus indirect rule; the various permutations have been laid out by Schreiber (1992) and are only briefly re-iterated here. State-imposed changes in the levels in the political organization may be mirrored by changes in the site size hierarchy. A reduction in the number of levels in the settlement hierarchy can indicate a breaking down of the local system by the empire, while an increase in levels points to a consolidation of political control under a regional center, either local or imperial.

Direct rule would be indicated by the presence of an imperial center, with a prevalence of imperial architecture and artifacts. The center may be a newly established site, or established within or next to a large local site that was an existing focus of political power. Other indicators of direct rule are the establishment of numerous other imperial sites, such as storage areas, garrisons, fortifications, etc. A less direct presence, such as a strategy of supervised rule, is indicated by the presence of fewer state sites and structures, possibly limited to a few imperial style buildings within the local center. The absence of imperial architecture and sites within a region known to be part of the empire implies a strategy of indirect control.

Economic Organization. The imperial strategies of exploitation in a region could be reflected by changes in the indicators of economic organization, as noted above, dating to the period of imperial occupation. State storage complexes may contain evidence of the types of goods produced in the region, but may also hold materials brought in to make up for local deficiencies. In the Andes, the Incas commonly focused on increasing agricultural production, and on the production of textile, ceramic, and metal goods.

Infrastructure. Changes and investments in infrastructure in the province may be indicated by the appearance or improvement of roads, bridges, irrigation works,

terraces, etc. during the imperial period. Such features can be difficult to date because they are not always associated with datable archaeological deposits, and the task often depends on diagnostic elements of construction. Re-use or improvement of local facilities may be indicated by imperial structures constructed on top of local ones, or expansion of existing facilities. Imperial re-use without improvements may be indicated by the construction of imperial sites alongside local roads or bridges, etc. The Incas are well-known for their road system, messenger service, bridges, and terracing projects, which may be evident in most provinces of their empire. Certain characteristics of Inca roads, terraces, bridges, and the like are diagnostic of an imperial style. However, in other cases where local labor was mobilized under indigenous supervision, some of these items could have been built or expanded in a totally local style.

Military and Strategic Concerns. The empire's concern with internal strategic or military issues may be indicated by the remains of fortifications and garrisons near population centers, and evidence of the removal of local people from defensible sites and their consolidation into larger settlements. The presence of defensive sites and control points at restricted entrance points on the provincial borders suggests concerns with exterior threats (i.e., border defense). The state's intent to control passage through the region may be indicated by installations that could serve as control points along bridges, roads, mountain passes, and other locales where travelers could be easily detained. Imperial storage, housing, and rest points can all be part of the system to support the military.

Religious and Ceremonial Organization. The continued use of local ceremonial sites and structures and the production of ritually significant artifacts indicates a state policy allowing the perpetuation of the local religious system. The

establishment of imperial shrines, temples, or other ceremonial sites or structures, combined with the appearance of imperial ritual artifacts indicates a strategy of imposing the state religion. The presence of both during the imperial occupation implies a more complicated approach of allowing the co-existence of the state and local religions. Changes in local iconography and stylistic elements incorporating imperial traits, along with imperial-style structures or other elements within local ceremonial sites indicates co-option of the local religion by the state. Within the Inca realm, the Inca approach to local religions varied widely, but often involved establishing imperial ritual sites and structures or co-opting local ones. Inca religious practices were tightly intertwined with methods of governing, so evidence of Inca rituals might be found in almost every province, and be more prevalent in regions under more direct state control.

Predictions for Saraguro

The limited amount of information available from ethnohistory and previous archaeological work in the Saraguro area allows for a tentative assessment of some of the pre-Inca conditions of the province and the nature of the Inca occupation as well as some predictions of what may be found in the region.

Resettlement. Oral tradition and the extensive nature of Inca resettlement projects in general leave little doubt that *mitmaqkuna* were brought into the Saraguro region. Unfortunately, the known ethnohistory gives few clues as to the Inca objectives of resettlement in Saraguro. Thus predictions of how their presence would be manifested in the archaeological record cannot be very specific, but we can speculate about some possibilities. For instance, Espinoza (1988a:345-346) indicates

that either ethnic Cañaris, Chachas, or Cuzcos² were stationed in nearly every province of Tawantinsuyu, so it is quite likely that members of one of those groups were settled in the Saraguro region. It is unlikely that the *mitmaqkuna* were Cañaris because it appears that the Saraguro residents in the years following the fall of Atahuallpa were fighting ethnic Cañaris because of the latter group's collaboration with the Spaniards (see Chapter 4). Furthermore, Saraguro seems to have been an administrative unit within the Inca province of Hanan Cañar, implying that even if Cañaris were stationed there, they would not have been considered *mitmaqkuna*. There is no mention of Chachas in either ethnohistory or oral tradition, but there are hints and suggestions that *mitmaqkuna* from the Cuzco region were placed in Saraguro. Saraguro oral traditions also specifically mention Colla immigrants from the Lake Titicaca region of Bolivia, though no documentary evidence has surfaced that could help confirm this. In the end, it is quite possible that both Collas and Cuzco natives were resettled in Saraguro.

The labor assignments of the *mitmaqkuna* and the objectives of Inca resettlements in Saraguro are likewise unclear at the present. There is the suggestion that the colonists were soldiers in the Inca army (J. Belote and L. Belote 1994c:II:3; L. Belote and J. Belote, editors, 1994:11-12), which could mean they served as a garrison at local Inca sites, or manned defensive sites within the territory. Otherwise, the remainder of the immigrants may have been generalized farmers, or given permanent labor assignments in some other capacity. Moreover, we do not know how many *mitmaqkuna* were brought into the area, or what percentage of the native population was removed. It is certainly possible that the entire native population was

² In this context, "Cuzcos" seems to refer to people originating in the Cuzco region, and who may have been either ethnic Incas or "Incas by privilege."

removed, as oral tradition and ethnohistory make no mention of natives remaining in the region. By any account, the field implications cannot be narrowed farther than to concentrate on the possibilities associated with soldier *mitmaqkuna*.

Local Political Organization. The pre-Inca inhabitants of Saraguro were probably organized into some form of chiefdom, as was the case in many parts of the Andes just before the expansion of the Inca Empire, especially in Ecuador. Whether the people of the Saraguro area people were organized into simple or complex chiefdoms is uncertain, but survey data may be able to distinguish either two or three levels of sociopolitical hierarchy.

Local Economic Organization. Little is known about the native economic focus, but identified artifacts from the region do not suggest economic specialization in ceramics, metals, or other crafts. The economy probably had a generalized agricultural focus, with the standard major crops of the Andean highlands, such as corn, beans, potatoes, etc. There may have been some utilization of local mineral resources, but no known sources are located within the survey area. Also, there may have been some exploitation of lowland rainforest resources, which lie not too far away to the east. Saraguro could have been situated along trade routes going north and south between highland groups, or coming from the coastal zone to the west and the rainforest to the east.

Local Infrastructure. It is likely that there were local paths, if not roads, between sites and leading to other regions, along with bridges to cross the many streams and rivers in the region. However, pre-Inca roads and bridges may not have been of very durable construction, and may have been replaced by Inca constructions. Because the relatively wet environment of the Saraguro region allows for farming without major irrigation works in the present, it is possible that large-scale irrigation

works were not constructed in pre-Inca times. Likewise, large terracing projects were probably not required for agricultural production in the area. Overall, the pre-existing infrastructure around Saraguro may have been on a basic level.

Local Military and Strategic Concerns. Reports of frequent finds of stone mace heads around Saraguro suggest some concern with warfare, but during what period is unclear. Given the ethnohistorical hints of resistance to Inca conquest, there may be some defensive structures or fortifications in the region.

Local Religious and Ceremonial Organization. Ethnohistory indicates that the mountains of Puglla and Acacana were the most sacred peaks around Saraguro, and thus there may be evidence of local ceremonialism on their peaks. Other geographic features may have been the subject of additional ceremonial activity.

Confirming Inca Imperial Presence. As described in previous chapters, the ethnohistorical accounts and the known archaeological sites in the area leave no doubt that the Inca Empire had indeed annexed, occupied, and controlled the Saraguro region. Consequently, the current project need not focus on establishing the fact of Inca control of Saraguro, but rather on analyzing the nature of that control.

Acquisition of Province. For the Inca invasion of Saraguro, ethnohistory indicates that the locals resisted subjugation (see Chapter 4). In the most specific reference, it is said that the Palta people made their final stand against the Incas in the rugged lands around Saraguro (Cabello Balboa 1945 [1586]:305). Because of the difficulty of identifying the occurrence of warfare, especially in vegetated environments like that of Saraguro, it is unlikely that survey will reveal any direct surface evidence of such a battle. On the other hand, it is more likely that there will be some surface indications that the pre-Inca Saraguros were prepared for conflict. Most likely, there were fortified or defensible settlements, notably hilltop habitations,

which are common in many highland Andean regions during this period. Considering the Inca habit of moving people from defensible sites to lower locales, we may expect to see a shift of settlements in Saraguro. Overall, there may be no unambiguous evidence of armed resistance to Inca rule.

Later Resistance. Ethnohistory has not revealed whether the local people (if any remained) or *mitmaqkuna* rebelled against Inca domination after the initial conquest. However, the reports that residents of the Saraguro/Chaparra region held out against the Spaniards for a number of years and maintained allegiance to the Inca cause suggest that the majority of the people there were loyal to the empire.

Political Organization. Inca administration of the Saraguro region was probably centered at the two sites known from ethnohistory and previous archaeological research, Tambo Blanco and Villamarca. These sites may have served administrative functions, with the region under direct Inca control, or they may have served as basic *tambos* if the region was indirectly ruled. The presence of cut stone architecture at Tambo Blanco (Uhle 1923) suggests that at least that site was more than a simple way station. No map of Villamarca is available, so little can be predicted regarding its role in the Inca political organization of the region.

Inca Economic Organization. Too little is known from ethnohistory and previous archaeological work to speculate on how the Incas may have re-organized the economic system of the area. No high quality artifacts are known, so craft specialization may be unlikely; agricultural intensification or production of raw materials may have been the likely focus.

Infrastructure. Ethnohistorical evidence indicates that the main north-south Inca road passed through Saraguro, so there may be surface evidence remaining provided it is not totally obscured by the Pan-American Highway. Some earlier

archaeological works have suggested that there were actually three branches of the main road going north to Azuay and Cañar; there may be evidence of one or more of those routes near Saraguro depending on how far apart they lay. There may also be some evidence of bridge-building over the Río Paquishapa, the major river to be crossed by the Inca road in the basin.

Military and Strategic Concerns. Because one ethnohistorical account (Cabello Balboa 1945 [1586]:305) names Saraguro as the location where the "Paltas" fortified themselves against the Incas, and was subsequently the place where the Cañaris came to surrender, there may be some evidence of Inca fortifications in the region. There could have been control points or fortifications at access points within the basin, especially to the north and south along the main Inca road. The Incas may have placed outposts of some sort along where the exterior border of the empire was situated somewhere to the east near the Amazon Basin.

Religious and Ceremonial Organization. As mentioned above, ethnohistory relates that the mountains of Puglla and Acacana were the most sacred peaks in the region, and as such they also were likely to have been the focus of Inca ceremonialism on their peaks. Most evidence, e.g., of sacrifices, may be sub-surface, but it is possible platforms or other small structures may have been constructed on the mountains during the Inca Period. Also, many aspects of the nearby site of Ingapirca, including its cut stone architecture, layout, and out of the way location indicate it to be an Inca ceremonial site, but its exact focus is unknown. The Incas are likely to have incorporated other notable topographic features into their own ceremonial system as well.

FIELD METHODS

As previously discussed, examination of state-imposed resettlement requires a regional perspective, which is best approached archaeologically with a site survey. With a focus on collecting data from multiple categories, namely settlements, artifacts, and architecture this methodology provides the best means for recognizing the presence of *mitmaqkuna*, assessing the pre-Inca conditions, and evaluating the nature of the imperial occupation.

Survey Coverage and Stratification

Because little systematic work has been conducted in the Saraguro area, the preferred survey strategy is one with the potential to reveal the entire range of site types in the region, allowing for a characterization of both the late pre-Inca and Inca occupations. Thus, the survey was centered around a zone where the Inca presence may have been strongest, including known Inca installations and the route where the main north-south Inca road was likely to have passed. The aim was to cover as much of the Saraguro Basin as possible, encompassing a region with distinct geographical boundaries, and hopefully what may have been a political unit or group of units in both periods.

Survey during field work from August, 1994 through April, 1995 covered approximately 79 km², reaching north to the Inca site of Villamarca and the hill of León Dormido, west past the large and prominent peak of Cerro Puglla, south to Cerro Sirencapa and Cerro del Oro (a.k.a. Cerro del Loro), and east to the *monte* above the pasturelands and settlements on the east slopes above the Río Oñacapac (see Figure 6-1). While the resources of the project precluded extending coverage south to the drainage around the peak of Acacana, excursions were made there to a



Figure 6-1. Project survey area.

few pre-Inca sites and to the known Inca sites of Tambo Blanco and Ingapirca. Various factors limited the survey to covering less than 0.5 km² per day, about half of the rate originally planned.

The varied environments of the Saraguro area precluded a strategy of consistent 100% coverage, so the region was stratified into three zones based on the major environments detailed in Chapter 3: cultivated lands, pasturelands, and *monte*. These zones were often closely intertwined, and the interfaces between zones were quite irregular, requiring frequent switching of survey techniques as land was traversed.

Cultivated lands were surveyed with a 100% coverage strategy. Transects were based on topography, such that their direction and length were usually planned so that the majority of walking was undertaken perpendicular to the slope of the land. The crew of three to five members were spaced 20 to 25 m apart for each transect. The survey took place during many phases of the agricultural cycle, so depending on when a field was traversed, it may have been fallow, in the process of being plowed, or with plants in some stage of growth. To avoid damage to crops, fields that were recently plowed or planted were skirted and observed along their edges. The fields were often less than 25 m wide, so coverage was seldom adversely affected when they had to be skirted. Artifact visibility was excellent when fields had been recently plowed, harvested or planted. Visibility diminished as the crops grew, though the soil could always be seen along the edges of fields and between plant rows. Trails, irrigation canals, and other features also provided plenty of opportunity to observe the soil, and in some cases, trails and roads created exposed soil profiles of two or more meters in depth.

The coverage of **pasturelands** was likewise 100%. Due to the ground cover,

visibility of soil was lower, but the cleared state of the land and the low grass exposed architectural remains and other alterations to the landscape, such as terracing. In this zone, spacing between crew members was 25 to 35 m, with transects traversed according to topography. Special attention was given to examining footpaths, road cuts, and other features that exposed soil. Soil also could be seen in spots where the land was subsiding due to deforestation and saturation from rainfall; those areas were sometimes avoided due to steep and dangerous conditions. In locales in pasturelands where the potential for archaeological sites seemed high but no soil was exposed, trowel probes were made to look for subsurface materials.

In the *monte* zone, visibility of soils and artifacts was often very poor on account of the heavy vegetation. The foliage also precluded any attempt at straight or systematic transects, so these lands were inspected along all trails and other locations of exposed soil, and an attempt was made to investigate the summit of every hill, mountain, or ridge, where the probability of sites was highest. As in the pasturelands, trowel probes were conducted in spots of low visibility where sites were likely to be located, such as hilltops with evidence of terracing. Occasionally, in the areas characterized by the more xeric plant communities, soil was easy to see between the plants. Overall, much of the land covered by *monte* was very steep or located in the higher elevations, making conditions unfavorable for settlement.

Finally, within the town of Saraguro itself, unusual circumstances enabled the examination of subsurface soils. During the course of the survey, the municipal government was installing a new sewage system, digging trenches one to two meters deep throughout the town. As we left town and returned each day, we availed ourselves of the opportunity to examine the trench walls and the spoils from those trenches, with the result that a enough territory was covered to be able to determine

that there was no substantial prehispanic settlement within the main area of the town. Otherwise, the outskirts of town were less densely populated, containing more agricultural fields and pastures than buildings; these areas were covered in the same manner as the other cultivated lands and pasturelands.

Survey Conditions and Impediments

While the modern use of the land provided good visibility of archaeological materials in most locales, there were often obstacles to gaining access to that land. The effort to obtain permission from the individual communities to survey their lands was frequently a very time-consuming task and sometimes more effort was spent on negotiations than on actual survey within the communities. In most cases, permission was granted, but was refused in a few instances, limiting access to certain areas, including the communities of Puente Chico, Gurudel, and Zharampampa. Even in communities where permission was easily obtained, we encountered the occasional landowner who refused access to their lands, leaving some small holes here and there in the survey coverage.

The weather was another hindrance, often providing days of rain, wind and rather cold temperatures, making survey very uncomfortable at best to unfeasible at worst. Trails in the hilly countryside could become dangerously slick during the rains, and on one occasion, the trails were flooded from runoff. Bad weather curtailed the number of full days of survey, and will have to be contended with in any future projects, especially those involving excavation.

International politics also served to produce an obstacle to conducting fieldwork. Late in January of 1995, the time of year when tension between Peru and Ecuador tends to rise because of long-standing disputes arising from the Protocol of

Rio de Janeiro, things got out of hand and a full state of war erupted in the Cordillera del Condor area, more or less 80 km to the east-southeast of Saraguro. Altercations periodically erupted in that area because part of the border between Ecuador and Peru was poorly delineated due to insufficient geographical knowledge of the region when the Protocol of Rio de Janeiro was signed in 1942 to end a war between the two countries.³ In 1995, the skirmishes between the two sides erupted to a level not seen since 1981, and the whole country of Ecuador was preoccupied with the engagement with Peru. Most of the southern highlands became militarized, and the major bridges along the Pan-American Highway had 24-hour guards who cleverly disguised the bridges by tying branches to the guardrails and hid themselves by staying in bright orange tents and building fires behind piles of rocks. Checkpoints were set up along the Pan-American Highway to control the movement of foreigners and possible Peruvian spies.

Being so close to the war zone, Saraguro experienced a substantial military and police presence, and fieldwork was affected in several ways. Mainly we were sometimes delayed in surveying and negotiating with community leaders, who were occasionally called away to attend to their community's contribution to the war effort. Occasionally, we were stopped and questioned by the police/military patrols, but never really hindered. As we surveyed, we were sometimes asked by locals if we were Peruvian spies, though they were obviously joking.⁴ But we did avoid surveying in remote areas where we were not known, for fear of actually being reported to the

[°] This issue appears to have been resolved since the field work was conducted.

⁴ When two elderly indigenous women in the community of Tuncarta asked us if we were Peruvians, they told us it was good that we were not, as they had been instructed to kill any Peruvians they came across.

authorities as spies.5

As a more tangible result of the war, some archaeological sites were affected by preparations made in case of invasion by Peruvian forces, specifically paratroopers. The paranoia about paratroopers dates back to the 1941 war when Peruvians did actually parachute into the *cantón* of Saraguro. Thus, in early 1995, defense works were constructed on the tops of a number of hills. These ranged from pillboxes and trenches to pointed wooden stakes covering the top of one site near San Lucas; the latter measure apparently had the aim of impaling any paratroopers who mistakenly chose to land there. These defense works disturbed parts of the archaeological deposits on these hilltop sites, though we heard no reports that any notable discoveries were made in the process. It is somewhat ironic that several of the hilltop sites that were used for defense against Peruvians were named Loma Pucara, or Fort Hill, and that they may have been used for defense against a different Peruvian invasion, namely that of the Incas.

Site Definition

Distinguishing prehistoric sites from modern refuse was sometimes problematic because houses were scattered throughout the countryside and a number of basic household items currently utilized in the region do not differ substantially from those used prehistorically. The two main areas of overlap were utilitarian ceramics, which are undecorated and thick, and ground stone items including manos, metates, and mortars. It also did not help that large grinding stones were often

³ The field maps I carried had many hilltops marked in yellow highlighter to note archaeological sites; during the border war, defense works were constructed on some of those same hills, which were also likely candidates if the Peruvians were to parachute in. It was quite conceivable that the military or police could have misinterpreted these as spy maps.

removed from prehistoric sites to be used in modern households. As a result, the presence of non-diagnostic utilitarian potsherds or basic grinding stones could not be used with certainty as an indicator of a prehistoric site. To avoid recording every recent refuse scatter, sites were defined in the field based on the presence of artifacts that were explicitly prehistoric, namely diagnostic ceramics or chipped stone, or in the absence of those, by the presence of other features that were known to occur in prehistoric sites, such as rock-faced terracing or cut-stone architecture. Features that were not associated with prehistoric material and were not obviously modern were noted and photographed, but not recorded as sites.

The extents of each site were determined based on the distribution of artifacts and prehistoric features such as terraces. Architectural extents could not be used to define the limits of pre-Inca sites because very few traces of architecture remained on the surface. The distributions of artifacts and features were gauged by those visible on the surface or in soil profiles, supplemented with trowel probes in locales of low soil visibility. On the whole, site limits were more or less discrete, often demarcated by topographical features such as streams or steep slopes. As a result, confidence in the recorded site limits is relatively high in most cases, with the most notable exceptions being Huiñashapa (Sar-31), which was covered in the upper reaches by forest, and León Pugllana (Sar-35), where access to the eastern portion of the site was denied.⁶ The locations and extents of the sites were recorded on 1:25,000 and 1:50,000 scale topographic maps produced by the Ecuadorean Instituto Geográfico

Access to León Pugllana was limited on the eastern portion of the site. The extents of the archaeological deposits could be smaller than estimated in that direction, or quite possibly larger, but even if the estimates of the extents in that direction distort the measurement of site size by 10 or 20%, León Pugllana would still be in the same site range with Loma Huelemón.

Militar.⁷ The variations in the topography in Saraguro and the level of detail provided on the topographic maps enabled sufficient accuracy in the plotting of site locations and extents.

Calculation of Site Sizes

Once site limits were ascertained, site size was determined in one of two ways. For the smaller sites, 50 and 100 m tapes were used to measure the sites directly, and site areas were calculated from those figures. For larger sites, topography and site size ruled out direct measurements with available equipment. Area measurements for those sites were calculated via CAD software using digitized site boundaries as demarcated on the topographic maps.

Population sizes were not estimated because of a lack of data that could allow for the characterization of prehistoric house size, density, and number of occupants. Nonetheless, it is important to note that it is not assumed that the whole site area as defined by the spread of artifacts was dedicated to habitation. On the contrary, it is quite likely that land incorporated within those boundaries was used for both houses and agricultural fields, but without extensive excavation data we cannot estimate what proportion was dedicated to each use and how that varied between settlements. It is probably more accurate to conceive of the site areas as representing the land area that had been cleared of natural vegetation and utilized for a combination of living, farming, and other purposes.

['] Maps of 1:50,000 scale were available for all areas covered. Within the project area, 1:25,000 scale maps were not available for the southern sections, but the majority of the survey was covered within the Saraguro 1:25,000 map.

Additional Site Data

In addition to locations and dimensions, the following data were recorded for each site:

- presence of artifacts including ceramics, ground stone, and flaked stone, with descriptions of the different types of each along with their estimated density on the surface.
- presence and description of other features, such as terraces, structural walls, and other architectural remains; count of the number of structures; description of construction techniques; all surface architecture except for terraces was mapped using various tape and compass techniques.
- depths of deposits (when visible), soil types, current land usage, site condition.
- information on topography, geology, major ecological zone, vegetation, and the location of the closest water sources.

Artifact Collection

Ceramics were collected at each site by making judgment samples of diagnostic and possible diagnostic sherds, with the aim of including at least one example of each type present. The collected sherds were for the most part from rims, bases, and handles, with the addition of any decorated or unusual body sherds. With this method, the periods of occupations of sites could be assessed, but no estimates could be made as to the portion of each site that may have been occupied during different phases in multi-component sites, with the exception of the Inca center of Paredones, where surface architecture allowed for demarcation of the Inca portion.

More systematic ceramic sampling was unfeasible during the survey for

several reasons. First of all, many sites contained too many surface sherds for a 100% collection. Second, the variable nature of the topography made surface artifact distributions extremely uneven. Third, the current land use of the sites was also very irregular; many sites had sporadic patches of land under cultivation, revealing numerous potsherds, while other sections were covered in pasture, presenting very few artifacts. The percentage of land used for cultivation or pasture or left covered in vegetation varied greatly. Finally, rural residents frequently collect distinctive ceramic fragments, including decorated sherds and the polypod vessel legs known locally as *gentil pishcu;*⁸ the surface could conceivably be completely cleansed of these artifacts on land that is intensively used. In total, systematically collected samples, however gathered, are very unlikely to be representative of any of the sites as a whole, nor would comparisons between sites based on those collections be reliable.

In addition to ceramics, obsidian samples were collected for potential sourcing or obsidian hydration dating in follow-up projects. The vast majority of other lithic materials were flakes with little potential to serve a diagnostic function; the few bifacially worked tools found were collected. Other unusual artifacts with diagnostic potential were also collected, including a small coca pot, a stone pendant, and half of a worked stone bowl. All artifacts collected during the survey are stored at the regional office of the Instituto Nacional de Patrimonio Cultural in Cuenca.

⁸ "Gentil pishcu" is a name that combines both Spanish and Quichua elements, "gentil" signifying the pre-Inca inhabitants of the region and "pishcu" being Quichua for "penis." The name undoubtedly derives from the somewhat phallic shape of the tripod legs, which the people encountered in sites they know to be prehistoric. The *gentil pishcus* are collected to use as a cure for "mal aire," a nebulously defined disease whose cause is oddly enough attributed to the presence of prehistoric graves, known locally as "huacas."

Test Pits

The project had the option to excavate test pits to obtain stratigraphic information on ceramics within sites where surface collections indicated a multicomponent occupation, but the option was not pursued for several reasons. First, there were no good candidates; a number of sites had deposits over a meter or more in depth, yet examination of profiles created by road and trail cuts or in other spots revealed rather homogeneous deposits with almost no visible stratigraphy and no changes in artifact types throughout the deposits. Second, much of the information that would have been sought through test pits was revealed through those exposed profiles. Third, there were few surface artifacts indicating any substantial occupation prior to the Integration Period within the survey area, leaving only sub-phases of that period to be distinguished from each other and from the Inca Period.

Dating of Sites

Sites were dated based on the presence of distinctive features such as terraces and architecture, and diagnostic artifacts including ceramics, ground stone, and carved stones. The use of ceramics for dating followed the basic chronology developed for the Saraguro area by the Belotes (J. Belote 1984; J. Belote and L. Belote 1996), supplemented by comparative ceramic information for late prehistory from neighboring provinces to the north (Collier and Murra 1943; Bennett 1946; Fresco 1984; Meyers 1998; Idrovo 2000) and to the south (Almeida 1983, 1987, Guffroy 1980, 1983c, 1987d) and refined with data from this project.

The collected ceramics were analyzed to the extent necessary to establish relative position in chronology, and to look for any obvious changes in vessel form or decoration that could be indicative of an immigrant group. An in-depth analysis of

the plain wares common to the area was outside the scope of this project. A more refined analysis, e.g., of pottery construction techniques, may be instrumental in future examination of the question of resettlement at sites exhibiting the most obvious changes in ceramic characteristics and other categories of data.

Site Typology

A number of different criteria were used to derive the site types applied to the survey results. Because little is presently known about the functions of the non-Inca sites in the region, they have been classified based on topographical and artifactual criteria. The imperial Inca sites are classified according to categories commonly used in Inca archaeology, based on artifactual and architectural remains. Sites were given sequential project numbers with the prefix "Sar-" and official numbers using topographic quadrangle map numbers, as prescribed by the Instituto Nacional de Patrimonio Cultural. The former numbers are used in this text, and a chart listing all sites with both sets of numbers is listed in the Appendix. For assigning site names, the preferred names were those used by people in the local communities to refer to the sites or the general topographic features where they were located. Otherwise, sites were given designations derived from the name of the closest community or from topographic features noted on the available maps.

Hilltop Habitation. These sites were defined by evidence of sustained habitation in locations on the tops of ridges and/or hills. The main gauges of habitation were sub-surface archaeological deposits, numerous domestic artifacts, and terracing. Thirty-one hilltop habitations were recorded, including one located outside of the survey area (Tintaturo, Sar-45). Another site outside of the project area, on the hill known as Buco or Milla, was visited but not officially recorded.

All hilltop habitation sites contained ceramics, though there were cases where ground cover frustrated the effort to recover diagnostic sherds. Most of these sites also contained domestic ground stone and lithics. The deposits noted in these sites ranged in depth from about ten centimeters to as much as four meters at León Dormido (Sar-15), where the cut for the Pan-American Highway has exposed a large soil profile. Hilltop habitations were usually medium to large in size, varying from 2,000 to 916,000 m². These sites were not confined to hill or ridge tops, as continuous evidence of habitation often spread over slopes and in saddles, sometimes incorporating several hills.

The hilltop habitation sites almost always included terraces, being found in 26 of the 30 within the survey region; they were also present at the two hilltop habitation sites that were visited outside of the project area, Tintaturo and Buco. The sites lacking terraces included two of the smallest sites (Sar-9, Sar-10), and two moderate size sites (Sar-12, and Sar-44). The terraces varied widely in size, with widths ranging from three to thirty meters, and lengths from five to eighty meters. The height of terrace retaining walls were more restricted in range, usually measuring between about one and a half to three meters.

The terraces in these sites do not suggest a very formal arrangement, and most are not very level. However, a number of sites have terraces with rock-faced retaining walls constructed of unworked field stones. Belote (1984:93) suggests that the presence of terraces may to some extent be correlated with the early and late phases of the Integration Period, with the late phase more often having terraces. However, the data from this project do not indicate any significant difference in the presence of terraces or rock-facing in the hilltop habitations of either sub-phase. The terraces were most likely used for habitation, perhaps in conjunction with agriculture. The

terraces held more cultural materials than lower, less sloping land, which would have been suitable for farming.

Lower Elevation Habitation. Lower elevation habitations are defined as those sites with evidence of sustained habitation that are located on lower slopes or more level surfaces, as opposed to extending over hill or ridge tops. These sites are small to medium in size, ranging from 1,150 to 74,500 m² in area, and they all lack terraces. Artifacts present usually include ceramics and lithics, and occasionally ground stone. Five lower elevation habitation sites were recorded.

Surface Scatter. Surface scatters were defined as areas with prehistoric materials on the surface, but lacking subsurface deposits that would indicate sustained habitation. These sites usually contained ceramics, and sometimes lithics and domestic ground stone, with ceramics being the most abundant type of artifact. One surface scatter, Cochapamba (Sar-16), had far more lithics than ceramics. These sites were small to medium in size, ranging from 6 to 60,100 m² in surface area. It is likely that the surface scatters represent deposition of refuse from habitation sites, or secondary deposits of materials washed down from hilltop habitation sites. There were a total of four surface scatters recorded.

Rock Shelter. While there are a number of naturally occurring rock shelters within the survey area, only one, Las Cuevas (Sar-3), showed surface evidence of prehistoric use. This site was probably utilized during much of prehistory as a short-term camping spot or small permanent habitation site. The cave also probably served as a locus of ritual activities at various times, as evidenced by the presence of a human bone and a fragment of *Spondylus* shell. Unfortunately, because of extensive disturbance there may be few artifacts left in situ at this site.

Inca Center. Inca centers were defined by sites containing remains of Inca

imperial-style architecture or other indicators of substantial Inca imperial occupation. The designation of "center" in this typology does not connote cities or other large settlements, rather, the sites are assumed to have been seats of local imperial political control, and may have served other functions as well. Two imperial centers were recorded, one within the survey area (Villamarca), and one to the south near San Lucas (Tambo Blanco); both had been mentioned by previous investigators.

Inca Storage Site. Inca storage sites are defined by the presence of architectural remains showing standardized one-room structures arranged in a linear pattern along terraces, typical of Inca *qollqa* found elsewhere in the Andes. The presence of Inca ceramics was also used to confirm the Inca affiliation. Only one Inca storage site, located at León Dormido, was recorded during the survey. The *qollqa* that have been reported south of the Saraguro basin on the hill Buco will also be considered in the analysis, although they were not visited during the field work.

Inca Ceremonial Site. The concept of a ceremonial site in the Inca sense can be quite broad; in the context of this project, an Inca ceremonial site is defined as a site or feature that lacks evidence of substantial habitation, whose layout or form indicates a predominantly ceremonial use, and whose construction or associated artifacts show an Inca affiliation. Three Inca ceremonial sites were recorded during the project, two within the survey area, and one to the south.

The survey results are presented and discussed in the next two chapters; Chapter 7 covers the Integration Period, and Chapter 8 covers the Inca Period. The discussion in Chapter 7 focuses on assessment of the political, economic, and other conditions prevailing in the late pre-Inca period. Chapter 8 examines the nature of the Inca occupation, the evidence for resettlement in the Saraguro Basin, and the role resettlement and existing conditions may have played in the Inca strategy of conquering and consolidating their control over the region.

CHAPTER 7: THE SARAGURO PERIOD (INTEGRATION PERIOD), CA. A.D. 500 TO CA. A.D. 1460

This chapter covers the Integration Period occupation of the Saraguro Basin. The ceramic data and chronology are presented in the first section, the details of the survey results are presented in the second section, and the third section discusses what those data reveal about the cultural, political, religious, social, and economic systems of the region, with the aim of assessing what conditions prevailed upon the arrival of the Incas. The main emphasis of the discussion is on the patterning of settlements, supplemented by architectural and artifactual data. With the exception of terraces, architectural remains were very scarce on the surface of Integration Period sites; this precluded any detailed analysis of such features, so they are covered within the descriptions of settlements. Artifact distributions are described in a separate section within this chapter. In addition to the dated settlements, a few undated features are described because they are likely to date to late prehistory and their unusual nature warrants inclusion.

CERAMICS AND CHRONOLOGY

In regards to chronological terminology, I have chosen to follow the lead of the Belotes (Belote 1984, see Chapter 5), who refer to the local Integration Period occupation as the Saraguro Period. While on one hand it may be problematic to use a term that also applies to the modern indigenous people of the area (who themselves may have only limited ancestral links with the pre-Inca inhabitants), on the other hand, "Saraguro" is also a geographical designation that is used for both the town and the *cantón* in which it is situated. It would be convenient to utilize phase names from the Cañari area to the north (the provinces of Azuay and Cañar), where the material culture has much in common with that of the Saraguro region, but the differences are substantial enough that conflation should be avoided. At any rate, I feel the coining of new phase names would only complicate matters and the other alternatives are likewise unsatisfactory.

The Integration Period is rather long for a late prehistoric era; the Saraguro occupation can be divided into early and late sub-phases, based on differences in artifactual data and close correlation with ceramic styles from Azuay and Cañar. Although the definition and dating of ceramic styles in the two provinces to the north are still being refined (e.g., Idrovo 2000, Meyers 1998), it is clear that the early Saraguro Period corresponds to the late Tacalzhapa phase (Tacalzhapa III, according to Idrovo 2000), which dates from ca. A.D. 500 to ca. A.D.1200, and the late Saraguro Period correlates with the Cashaloma phase, which dates from ca. A.D. 1200 to the beginning of the Inca Period, ca. A.D. 1460. Although the objectives of this project focus on the late pre-Inca situation (i.e., the late Saraguro Period), the early sub-phase is considered as well to give a perspective on the trends in societal development as opposed to creating a static picture consisting only of the late phase.

The ceramics of the Saraguro Period are in general very utilitarian in manufacture and style, and those encountered during this project varied little from that described by Collier and Murra (1943) and Belote (1984). The most common vessel forms are large and medium sized jars and medium to small bowls; sherds from a few plates were also found. The *compotera* form, which is a small to medium sized shallow bowl on a very tall pedestal base, was also present in a number of sites. Jars and bowls were common in both early and late sub-phases, but the *compotera* form appears to be confined to the late Saraguro Period.

Vessel walls were usually thick, uneven, and not well-smoothed, with a coarse

paste that often had mica or grains of quarts included in the temper. The vast majority of the ceramics were unslipped and undecorated, representing plainly made cooking and serving vessels. The most common decoration was a red slip, sometimes fugitive, applied to both interior and exterior surfaces of bowls, and the to the exterior of jars. The latter often had a band of red slip continuing below the lip on the interior surface of their rims. Painted or plastic decoration was otherwise very rare. However, fabric impressions was sometimes present on interior or exterior walls of bowls from the late sub-phase; this appears to be a result of manufacturing techniques rather than intentional decoration (J. Belote and L. Belote 1970). The ceramics of the late Saraguro Period appeared to be somewhat better made than those of the early subphase, tending to be better smoothed, more even in wall thickness and shape, and more frequently slipped.

Vessel Shapes and Rim Forms. Bodies of jars and bowls were always spherical or ovaloid, but rim shapes showed a wide amount of variation and low level of standardization. In fact, there were a number of unique rim forms that could be given categories of their own. Nonetheless, the most common rims on jars were the medium and widely flared types, and on bowls the open curved and straight thickened type were most prevalent. With the reservation that the variation within and between each category make the typology somewhat tenuous, rims were classified into the following fourteen types:

• Medium flared rim, Figure 7-1a. These rims have a concave profile with a medium flare, such that the neck at its narrowest point is between 75-85% of the rim diameter as measured at the lip. They have rounded lips, and the walls sometimes become thickened toward the lip. Measured rim diameters range from 12 cm up to 50 cm, but most are between 14 and 26 cm, indicating they


Figure 7-1. Saraguro Period rim forms, typical examples: a) medium flared (from Sar-22); b) widely flared (from Sar-14); c) vertical (from Sar-31); d) short angled neck (from Sar-6).

come from medium to large sized jars.

• Widely flared rim, Figure 7-1b. These concave jar rims flare more widely, with the neck narrowing down to 2/3 or less of the maximum diameter at the lip. The vessel necks tend to be taller and more narrow than those with medium flares. Rim walls sometimes become thickened toward the lips, which are rounded. Indicated rim diameters vary from 10 cm up to 32 cm, but most measure between 14 and 20 cm.

• Vertical, Figure 7-1c. These rims are nearly vertical with straight interior walls that angle slightly toward the interior of the vessel. Lips are rounded, but thickened on the exterior. Only two examples were found, with rim diameters measuring 22 cm and 28 cm, suggesting medium sized jars.

• Short angled neck, Figure 7-1d. These jar rims are distinguished by their short necks, measuring 3 cm or less in height from the bottom of the neck, and by the sharper angle formed where the neck meets the vessel body, as compared to the smooth curving forms of the flared rims. Rim walls are often thicker than the walls of the vessel bodies, and have rounded lips. Measured diameters range from 20 to 46 cm, with most between 20 and 22 cm.

• Thick beveled, with thickened lip, Figure 7-2a. These rims form a sharp angle with the vessel body, and are thickened substantially where the neck meets the body. The interior wall of the rim is flat, forming a beveled profile. The rim wall thins in the middle, and thickens again on the exterior toward the edge, forming a thick rounded lip. The two examples found measure 17 and 24 cm in diameter, suggesting medium sized jars.

• Beveled, Figure 7-2b. Jar rims of this type have straight walls that are angled slightly toward the exterior, and have flattened, beveled upper edges



Figure 7-2. Saraguro Period rim forms, typical examples: a) thick beveled (from Sar-35); b) beveled (from Sar-6); c) straight with exterior knob (from Sar-14); d) straight thickened (fromSar-23).

with rounded lips. Measured rim diameters from the three examplesrecovered range from 14 to 22 cm. One example, from Guandug Loma (Sar-6), has a small modeled circular knob on its exterior, just below its lip.

• Straight with exterior knob, Figure 7-2c. These rims have straight walls, which are angled steeply toward the exterior. They are thickened noticeably on the exterior, forming a rounded lip that is knob-like in profile. Rim diameters measure between 18 and 28 cm. These are probably rims from medium to large jars, but because only short fragments of these rims were found, it is also possible that they come from shallow bowls.

• Straight thickened, Figure 7-2d. Similar to the vertical form, rims of this type have straight interior walls, but are angled more steeply toward the interior of the vessel. Walls are thickened on the exterior, with lips that are slightly rounded. Only two examples of this type were found, with indicated rim diameters of 10 cm and 16 cm, they appear to come from vessels that could be described as neckless jars or deep restricted bowls.

• Straight angled, Figure 7-3a. These rims from open bowls have even, straight walls that are angled between 40 and 50 degrees, with rounded lips. Indicated rim diameters measure between 18 and 36 cm.

• Restricted curved, Figure 7-3b. This rim type represents restricted bowls with curving, convex walls. The rims have rounded lips, and are sometimes thickened toward the upper edge. Diameters measure between 7 cm and 26 cm. One small, complete cup with this rim form was found at Quillutoro on Loma Huelemón (Sar-11), and has a rim diameter of 4.5 cm.

• Open curved, Figure 7-3c. These rims with curving walls come from open, usually shallow bowls. They have rounded lips, and the walls are



Figure 7-3. Saraguro Period rim forms, typical examples: a) straight angled (from Sar-2); b) restricted curved (from Sar-23); c) open curved (from Sar-14); d) straight thickened (from Sar-21); e) thickened with flat lip (from Sar-11).

sometimes thickened toward the upper edge. This rim form is sometimes associated with bowls with ring bases, and *compoteras*. Diameters measure between 8 and 38 cm, with the majority below 30 cm.

• Straight thickened, Figure 7-3d. This type of rim forms straight, angled walls of open bowls, and are thickened toward the edge, often on the interior, but some are thickened evenly on both interior and exterior sides. Lips are rounded. Indicated rim diameters range from 14 to 32 cm.

• Thickened with flat lip, Figure 7-3e. These rims come from thick-walled, large open bowls. The walls are slightly curving with significant symmetrical thickening toward the edge. Lips are flattened, with slight rounding at their edges. The three examples found measure in diameter from 24 to 34 cm.

• Plate, Figure 7-4a. Rims were found from only three separate plates. Of those, two had measured rim diameters of 20 cm, and resembled very shallow bowls, with gently curving walls, rounded lips, and a base that was closer to rounded than flat. The third example, measuring 46 cm in diameter, was much flatter, and thickened on the interior wall toward the lip, which was rounded but curved slightly toward the interior. None of the examples were slipped or decorated. The plate form does not appear to be diagnostic of either sub-phase.

Handles. Few handles were found from Saraguro Period ceramics. Those that were collected were usually of the same type, a thick, wide form, with a double-rope shape (Figure 7-4b). These handles looked like they were made either by smoothing together two separate long cylinder lengths of clay, or by flattening out a thicker long cylinder and forming a channel down the length of its exterior. Most were 2 to 2.5 cm thick, 3 to 4 cm wide, and 7.5 to 10 cm long, while one small example was only 4 cm



Figure 7-4. Saraguro Period ceramics, typical examples: a) plate (from Sar-24); b) handle (from Sar-29).

long, but within the same range of thickness and width. No examples were found with attached sections of vessel bodies, so it is difficult to determine where and how they were attached, but it appears some of them may have been attached at the neck and body of large jars. One large intact jar shown to us by a local family had this type of handle attached to the mid-section of the jar body. This double-rope handle form may be diagnostic of the early sub-phase, but more data is needed to support that supposition. Strap shaped handles appear in a few settlements with Saraguro Period dates, but these appear to be diagnostic of an Inca Period occupation, and are described in the next chapter.

Bases. Many vessels, both jars and bowls, had plain, rounded bases. Also common were a range of polypod and ring bases, which are characteristic of Saraguro Period wares, and a few flat bases. The polypod types (except for one form) appear to be diagnostic of the early Saraguro Period, and ring base forms, including *compoteras*, are diagnostic of the late Saraguro Period, as are flat bases on bowls.

Polypod bases were attached to medium to large size jars. Although no complete vessels or bases were found that would have indicated how many legs were present on individual pots, but it is presumed from comparable ceramics in southern Ecuador that each would have had three to four legs. In general, the legs were somewhat crudely formed and undecorated, although occasional examples had some evidence of red or orange-red slip. As noted in Chapter 6, polypod legs are frequently collected by local residents, so the examples collected in the field were more fragmentary and less numerous than may have been expected. They can be categorized in the four following types (most examples collected were incomplete, so the size ranges given are approximations of the minimum measurements):

• Open, Figure 7-5a. This form is open with a wide channel running down the outer face, and varies in shape from conical to a nearly flat triangular form. This is the leg type referred to as hoja de cabuya ("cabuya leaf") by Collier and Murra (1943), because of its resemblance to the leaves of agave type plants. They varied in length from 12.5 to 16.2 cm in length, 4.0 to 5.8 cm in width, and 2.6 to 5.0 cm in thickness. Most examples tended to be greater in width than in thickness.

• Partially Open, Figure 7-5b. This type is a derivative of the *hoja de cabuya*, more conical than triangular, with a partially open, channeled outer face turning into an enclosed hollow cone part way down. They varied in length from 9.6 to 10.2, and in width from 3.7 to 5.2.

- Closed, Figure 7-5c. Legs of this type are of a totally closed, hollow core, conical shape, with a rounded bottom tip. No complete legs of this form were found, but examples varied in maximum width between 2.5 and 3.2 cm.
- Solid, Figure 7-5d. This type is solid, round in cross-section, more straight than tapered, and smaller in size than the other types. Only two fragments of this type were collected, and they both had a maximum width of around 2 cm.

The first three polypod types show a large range of variation in length, width, thickness, and general shape. They probably represent a continuum of legs formed with the same technique, and it is possible that many of the fragmentary examples identified as the closed type were in fact partially open near the base of the vessel. It is also likely that legs formed with hollow interiors needed some type of opening to prevent damage during firing, so that few, if any, of the legs were completely closed. The solid leg type is more distinct. It is rare and appeared more standardized (as far as can be judged from a sample of two), and does not fit on the continuum of possible



Figure 7-5. Saraguro Period polypod vessel leg forms, typical examples: a) open (from Sar-23); b) partially open (from Sar-15); c) closed (from Sar-26); d) solid (from Sar-9).

shapes represented by the other three types. It is possible that the solid type polypod leg could be from Inca-style vessels, such as the wide mouthed tripod form sometimes described as an incense burner or brazier. The Belotes (J. Belote and L. Belote 1996) report a similar leg form from the site of Cañicapa to the northwest of Saraguro; those legs are completely solid, but are larger and longer and could represent a different type or time period.

Ring bases appear to have been attached to small to medium sized bowls, although complete vessel profiles were not found. The ring bases varied in quality of manufacture, with some examples being very uneven in width of the ring walls and diameter. Most ring bases were covered with a red or red-orange slip on the exterior wall. A single, finger-width, round perforation was often found on these bases, usually within a centimeter or so of the bottom of the bowl (one such example is illustrated in Collier and Murra 1943:Plate 11, Figure 8). The perforation was common on *compotera* pedestal bases, and on some of the taller ring bases; many of the ring bases were too short to accommodate this element. Some ring based vessels exhibited fabric impressions, often within the bottom interior of the bowl. These ceramics were otherwise unembellished. Ring Bases could be classified into the following four types, although the forms varied widely and were not very uniform so that the defined types are likely to represent definable points on a continuum:

• Thickened, Figure 7-6a. The walls of this type become thickened toward the bottom, which has a rounded edge. Both the inner and outer walls of the ring are concave in profile. Bases of this type vary in maximum outside diameter from 8.5 to 24.0 cm, although most tend to be around 10 cm. They range in maximum thickness from 0.9 to 1.6 cm, and in vertical height (to



Figure 7-6. Saraguro Period ring base forms, typical examples: a) thickened (from Sar-24); b) flared (from Sar-24); c) tapered (from Sar-26); d) semi-straight (from Sar-21).

where the exterior wall of the ring met the base of the bowl) from 1.3 to 2.7 cm.

• Flared, Figure 7-6b. This type has walls that are approximately uniform in thickness, with a rounded bottom edge, and a flared profile wherein the interior wall is convex and the exterior is concave. These range in maximum diameter from 12.0 to 19.3 cm, in maximum thickness from 1.1 to 1.4 cm, and in height from 3.8 to 4.0 cm.

• Tapered, Figure 7-6c. The walls of this type of base are tapered, with walls thicker at the base of the vessel and thinner at the rounded bottom edge, with nearly straight interior walls and somewhat concave exterior walls. They vary in maximum diameter from 7.9 to 19.8 cm, in maximum thickness from 1.1 to 1.9 cm, and in height from 1.3 to 2.0 cm.

• Semi-straight, Figure 7-6d. This form has walls that are close to vertical in profile and are straight to slightly tapered, with bottom edges that can either be rounded or flattened. They tend to be smaller in size than the other types, ranging in maximum diameter from 5.5 to 8.3 cm, in maximum thickness from 0.5 to 1.0 cm, and in height from 1.4 to 2.2 cm.

Flat bases were found on a small number of small vessels (Figure 7-7), which were likely to have been bowls, although no complete profiles were collected. The bases were of small diameter, from 8 to 9 cm, with walls approximately 1 cm thick. These ceramics were undecorated. Similar small flat based vessels illustrated by J. Belote and L. Belote (1996) were undecorated and quite shallow, and sometimes included fabric impressions on the exterior sides of their bases.



Figure 7-7. Saraguro Period flat base forms: a) from Sar-21; b) from Sar-22).

Summary of Diagnostic Ceramic Traits

For the early sub-phase of the Saraguro Period, the most important diagnostic ceramic traits are the polypod base forms, with the exception of the small solid form. The double-rope handle form may also be diagnostic, as may be the short angled neck, beveled, and straight thickened jar rim types and the thickened with flat lip types of bowl rims. For the late Saraguro Period, diagnostic ceramic features include all forms of ring bases, the compotera vessel form, round perforations in ring and pedestal bases, flat based bowls, and fabric impression. Potentially diagnostic rim forms include the vertical and straight with exterior knob jar rim forms. The diagnostic potential of a number of these traits were noted by the Belotes (Belote 1984; J. Belote and L. Belote 1970), and are supported by the data from this project. Tables 7-1 and 7-2 list the diagnostic ceramic data for the sites recorded during this survey, and includes supplementary data from the Belotes' report (J. Belote and L. Belote 1996) which describes ceramics found at a number of sites also included in this project.

SURVEY RESULTS

Prehistoric settlement in the basin was concentrated in the Saraguro Period, representing a total of 38 out of 45 sites recorded within the survey zone (Figure 7-8). The most numerous sites were the hilltop habitations, of which there are 30 within the project area (plus two that were visited outside the survey zone). The remaining sites comprise five lower habitations, two surface scatters, and one rock shelter. Six of those sites (Sar-7, 10, 13, 20, 27, and 30), all of them hilltop habitations, could be dated to the Saraguro Period but could not be assigned to either of the sub-phases. The remaining sites contained artifacts diagnostic of one or both of the early and late

site number	ring base ¹	polypod ²	fabric impression	flat base bowl	compotera	early component	late component	phase indeterminat	site type ³
2						х			lh
3						х	х		rs
4	х		Х	х			х		hh
6	х	Х				х	х		hh
7								Х	hh
8		х				х			SS
9	х	х				х	х		hh
10								X	hh
11	Х	Х			Х	Х	Х		hh
12	х	Х				х	х		hh
13								X	hh
14	Х	Х	Х		Х	Х	Х		hh
15		Х				Х			hh
20								X	hh
21	Х			Х			Х		hh
22	Х		х	Х			Х		hh
23		Х				Х			hh
24	Х	Х			Х	Х	Х		hh
25		Х				Х			lh
26	Х	Х			Х	Х	Х	ļ	SS
27								Х	hh
28		Х				Х			hh
29						Х			hh
30								X	hh
31	Х	Х				Х	Х		hh
32	Х						Х		hh
33		Х				Х			hh
34	X	X				X	X		nn 1.1
35	X	X	X			X	X		<u>nn</u>
30		X				X			lh lh
20	X	X			X	X	X		lli hh
20	X	X				X	X		hh
39	X	X				X	X		hh
40	Х	X				X	X		1111 115
41	v	Х				X	v		lli hh
42	A V	v	v			v	A V		hh
43	Å	A v	Å			A v	Λ		hh
44	v	A v	v			A v	v		hh
¹ Includ	A les ring b	A Nases with	A single r	erforatio	n n	А	Λ		1111
2 Exclu	des solid	tvne	i singic p	, cirorano	,11.				
3 hh = h	illtop ha	bitation.	lh = lower	er habitat	tion, ss =	surface	scatter, r	s = rock s	shelter.

Table 7-1: Saraguro Period sites and diagnostic ceramic traits.

site number	short angled neck jar	beveled jar	straight thickened jar	thickened with flat lip bowl	vertical jar	straight with exterior knob jar	early component	late component	phase indeterminate	site type ¹
2	х						х			lh
3		Х				Х	х	Х		rs
4								Х		hh
6	х	Х		Х			х	Х		hh
7									Х	hh
8							Х			SS
9							Х	Х		hh
10									Х	hh
11	Х			Х			Х	Х		hh
12							Х	Х		hh
13									X	hh
14						X	X	X		hh
15	X						Х			hh
20									X	hh
21						X		Х		hh
22								X		nn hh
23			X	X			X			nn hh
24							X	X		1111 115
25							X	v		
20							А	Λ	v	55 bb
27		v					v		Λ	hh
20	v	Λ					x			hh
30	Λ						А		v	hh
31					x		x	x	Λ	hh
32					x		A	x		hh
33			x		A		х	А		hh
34							X	x		hh
35							х	х		hh
36							х			lh
37							х	х		lh
38							х	х		hh
39							х	х		hh
40							х	х		hh
41							х			lh
42								Х		hh
43							х	Х		hh
44							х			hh
45							х	х		hh
¹ hh = hilltop habitation, lh = lower habitation, ss = surface scatter, rs = rock shelter.										

Table 7-2: Saraguro Period sites and diagnostic rims.

phases. Sixteen of those sites were occupied during both phases; these include 13 hilltop habitations (Sar-6, 9, 11, 12, 14, 24, 31, 34, 35, 38, 39, 40, and 43), one lower habitation (Sar-37), one surface scatter (Sar-26), and one rock shelter (Sar-3). The break-down of Saraguro Period sites according to type and phase is shown below in Table 7-3.

Site Type	Saraguro Period	both early and late	early component only	late component only	sub-phase indeterminate
Hilltop habitation	30	13	6	5	6
Lower habitation	5	1	4	0	0
Surface scatter	2.	1	1	0	0
Rock shelter	1	1	0	0	0
Total	38	16	11	5	6

Table 7-3. Sites within survey area dating to the Saraguro Period, by site type and sub-phase.

The Saraguro Period sites are concentrated in the central part of the basin, primarily situated on moderately high ridges and hilltops. Within the basin, no habitation sites were found above 2,900 m, and none below 2,320 m. Because the survey area only incorporated a small amount of land below 2,300 m, composed mainly of uninhabitable steep riverbanks, this lower limit is essentially an artifact of the project boundary. However, the purposeful avoidance of land over 3,000 m by people of the Saraguro Period is very evident, as shown by the outer parts of the project area where the large amount of land surveyed above that altitude revealed no settlements dating to that era.



Figure 7-8. Sites of the Saraguro Period. Of the small sites shown, Sar-2 has an early component, Sar-9 has both early and late components, and Sar-10, 13, and 27 date to the Saraguro Period, with sub-phases indeterminate.

Early Saraguro Period Sites

Twenty-seven sites within the survey area date to the early Saraguro Period, including 19 hilltop habitations, 5 lower habitations, 2 surface scatters, and 1 rock shelter (Figure 7-9). They are located between elevations of 2,340 and 2,800 m, with an average of 2,603 m (median = 2,600 m). The lowest site (Sar-26) is a surface scatter, as is one of the three sites tied at the highest elevation (Sar-8).

Hilltop Habitations. The 19 hilltop habitation sites (Sar-6, 9, 11, 12, 14, 15, 23, 24, 28, 29, 31, 33, 34, 35, 38, 39, 40, 43, and 44) are concentrated in the center and the northeastern sections of the survey zone. They vary in size from 0.2 ha to 91.6 ha, with an average site size of 20.6 ha (median = 13.5 ha). The elevations of the sites range from 2,380 to 2,800 m, with an average altitude of 2,612 m (median = 2,600 m). Terraces are present on all but three settlements (Sar-9, 12, and 44), and the terraces at six of them contained rock-faced retaining walls (Sar-24, 29, 33, 35, 38, and 40). The lack of terraces may be correlated with smaller sizes, as the three sites without them ranked 12^{th} , 17^{th} , and 19^{th} in area.

Other than terraces, architectural remains of possibly prehispanic origin were found at only one site, Sar-38. On the western hilltop encompassed by that site lie the collapsed rough stone walls of a single-room rectangular structure, measuring about 4 m by 4 m. While that building had certainly been abandoned long ago, buildings of similar size and plan, known as *chozas*, are still constructed in the countryside, thus a prehistoric date for any such solitary structure cannot always be assumed. However, Sar-38 was also notable in containing another constructed feature, a circular area paved with stones. The circle measured 5.2 m in diameter, covered with flat stones well-fitted together, and ringed by upright rocks 20 to 30 cm wide. While an informant stated that people now use the feature for drying wheat, it bears a



Figure 7-9. Early Saraguro Period sites. Of the small sites shown, Sar-2 is a lower habitation, and Sar-9 is a hilltop habitation.

resemblance to a paved stone feature that capped an elite burial and dated to the Cañari occupation at the famed Ingapirca in Cañar province (described in Fresco 1984b). Other sites in the Saraguro region lack features of this type, although at León Dormido (Sar-15) there is a large cleared circular area of white clay soil.

Lower Habitations. The five lower habitation sites dating to the early phase of the Saraguro Period (Sar-2, 25, 36, 37, and 41) are generally smaller in size than the hilltop habitations, measuring from 0.1 to 7.5 ha, with an average size of 4.2 ha (median = 5.2 ha). They are located at elevations between 2,380 and 2,710 m, with an average of 2,582 m (median = 2,620 m), putting them, as the name of the site type implies, somewhat lower than the hilltop habitations. The lower habitations are essentially featureless, with no evidence of terraces or other architectural features.

Compared to the hilltop settlements, lower habitations exhibit much more variability in basic characteristics. For example, they include sites located on steep hill slopes (Sar-36 and 37), open, flat lands (Sar-25), and topography that lies inbetween (Sar-2 and 41). In fact, this site type probably conflates several fundamentally different kinds of settlements that simply share the distinction of being habitations *not* located on hilltops.

Yet rather than splitting them into smaller classifications, it is more instructive to deal with the variations inherent in the specific sites. Sar-37, for example, was probably originally part of the much larger site of Yarimala (Sar-43). The construction of the Pan-American Highway seems to have divided the site in two, resulting in a smaller heavily disturbed site on the lower side (Sar-37), and a large, more intact hilltop habitation above. The resulting physical separation of the two loci and the sequence of recordation led to the decision to designate them as two separate sites. Similarly, Sar-25 is close enough to a hilltop habitation, Sar-24, to suggest that

it was functionally an extension of the latter. In contrast, Sar-2 and Sar-41 are physically discrete sites. The former was a small settlement with few diagnostic sherds and located far from other habitations, most likely representing an occupation of limited duration. The latter is larger and appears to have been occupied longer, and notwithstanding the topographic distinction, is similar in many ways to the hilltop habitations. Finally, Sar-36 is unusual for being located far from other habitations on an unterraced steep slope that would be more difficult to settle than hilltops or flatter areas.

Surface Scatters. The two early Saraguro Period surface scatters (Sar-8 and 26) are moderate in size, measuring 6.0 ha and 3.1 ha, respectively. They differ markedly in location: Sar-8 is located on a hilltop at 2,800 m, while Sar-26 is placed much lower, at 2,340 m, on a large river terrace. In all likelihood, Sar-26 represents material remains that made their way down slope from the habitations located on the slopes above (Sar-24 and 25), either as a result of erosion or intentional refuse disposal. Sar-8 is more puzzling. As it is located on a hilltop, the scatter of artifacts cannot be the result of erosion from some higher habitation, and is unlikely as a convenient place to deposit refuse. Instead, Sar-8 may have been a locus of ceremonial activity. It has the advantage of an excellent view of the sacred peak of Cerro Puglla, and the prominence where the site is situated, San Vicente, is part of a ridge that connects to Puglla. Furthermore, a modern cross has been erected on the summit of San Vicente, indicating a level of religious significance in the present that may well have roots in the prehispanic era.

Rock Shelter. The one rock shelter with signs of occupation within the survey area, Las Cuevas (Sar-3) was likely utilized during the early Saraguro Period. As a small site of not more than 500 m², its role in the basin as a habitation site must have

been limited. In fact, the capacity for settlement within the cave is dwarfed by the habitable land above it on Loma Huelemón. It may have been more important as a locus of ceremonial activities, as suggested by the presence of a human bone and a fragment of *Spondylus* shell. However, as a multi-component site, such non-diagnostic surface finds cannot be readily assigned to this specific phase, and it is entirely possible that the shell and bone were deposited in a different period.

Late Saraguro Period Sites

There are a total of 21 sites with late Saraguro Period components, comprising 18 hilltop habitations, 1 lower habitation, 1 surface scatter, and 1 rock shelter (Figure 7-10). These number six fewer than in the early Saraguro Period. The same array of site types continued to be utilized in this phase; no new site types were apparently created, although lower elevation habitations actually may have been abandoned altogether (see below).

Hilltop Habitations. The 18 hilltop habitations of the late Saraguro Period (Sar-4, 6, 9, 11, 12, 14, 21, 22, 24, 31, 32, 34, 35, 38, 39, 40, 42, and 43) represent a decrease of one site from the early phase. They range in area from 0.2 ha to 91.6 ha, with an average of 22.1 ha (median = 15.3 ha). The sites tend to be located in higher elevations, varying in altitude from 2,380 m to 2,800 m, with an average of 2,653 m (median = 2,655 m). All but two of the hilltop habitations have terraces, and five sites have terraces with rock-faced retaining walls. As in the early Saraguro Period, the lack of terraces corresponds to small site size; in the late phase, the two hilltop habitations without such features are the two smallest sites of this type. Two of the settlements (Sar-32 and 38) had single-room rectangular structures, probably of modern origin. As described above, a paved stone circle was found at Sar-38, which



Figure 7-10. Late Saraguro Period sites. Of the small sites shown, Sar-9 is a hilltop habitation.

has both early and late Saraguro Period components. No other potentially prehistoric architectural remains were observed.

Lower Habitations. Only one lower elevation habitation, Sar-37, shows evidence of occupation during this phase; the other four lower habitations of the early Saraguro Period were apparently abandoned. However, because Sar-37 was most likely an extension of the hilltop habitation Yarimala (Sar-43, as discussed above), it appears that distinct lower elevation settings were deserted in the late Saraguro Period.

Surface Scatters. Only one surface scatter, Sar-26, could be dated to the late Saraguro Period. Although the site located directly above it (Sar-25), was apparently abandoned, the adjacent habitation (Sar-24) was still occupied, and was probably the source of the refuse that ended up below to form Sar-26.

Rock Shelter. The rock shelter site of Las Cuevas (Sar-3) again shows evidence of use during the late Saraguro Period. There were no indications of specific activities that could be dated to this phase.

Settlement Patterns: Changes from the Early to Late Saraguro Period

The settlement patterns show some notable shifts from the early to late phases of the Saraguro Period. First, the number of sites appears to have declined over time, with six fewer sites occupied in the late Saraguro Period than in the early phase. Most notably, the third largest site of the early Saraguro Period, León Dormido (Sar-15), was apparently abandoned in the late phase.

Second, a shift in settlement location is seen with the abandonment of lower elevation habitations in the late Saraguro Period in favor of hilltop sites. Three of four lower elevation sites of the early phase have no late component, and were perhaps deserted in favor of nearby hilltop sites. As discussed above, the only site defined as a lower elevation habitation that was not abandoned after the early Saraguro Period, Sar-37, is probably not a distinct site but rather an extension of site 43, the division of the two being an artifact of the construction of the Pan-American Highway.

Third, the late sites tend to be larger than those of the early Saraguro Period. The average size of habitation sites (both hilltop and lower elevation settlements) shows an increase from 17.2 ha in the early phase to 21.2 ha in the late phase, a 23% gain. However, the real difference in site sizes is masked because many of those sites had both early and late components. It is likely that the sites that continued to be occupied expanded in size, although that cannot be demonstrated with the current data set because survey conditions did not allow for systematic surface collection (see Chapter 6). The evident increase is instead a reflection of the size differences of the single-component sites, which is more dramatic, showing a 77% increase in the average habitation site area from 8.4 ha for sites abandoned after the early Saraguro Period to 14.9 ha for sites established in the late phase. This is a remarkable increase considering that the third largest late Saraguro Period site, León Dormido, was abandoned by the late phase. The expansion in site size coupled with the decrease in site numbers indicates a consolidation of habitation, but because the total land area covered by settlement decreased, there may not have been any increase in the total population.

Fourth, there is a perceptible change in the elevations of habitations from early to late. Although the late Saraguro Period sites are located within the same span of elevations as those of the early phase, from 2,340 m to 2,800 m, the average altitude of hilltop and lower settlements increased 47 m from 2,606 m to 2,653 m. By

excluding the 14 multi-component sites, the change is more marked with the average elevation rising from 2,560 m to 2,690 m, an increase of 130 m. Unfortunately, the two highest Saraguro Period sites within the survey area, Sar-10 and Sar-20, at 2,880 m and 2,900 m, respectively, could not be dated to either phase; their inclusion could certainly affect these calculations.

While the new settlements established in the late phase tended to be at higher altitudes, the inhabitants of the region still avoided lands above 2,900 m. This tendency is probably related to environmental zones and topography. In general, within the Saraguro Basin, land at the higher elevations may have been too steep and too densely vegetated to attract settlement, or differences in rainfall patterns may have made higher parts unsuitable. It may have been the case that there was enough suitable land at the somewhat lower elevations that people had no need to settle above the 2,900 m level. Outside of the Saraguro Basin, sites from the same time period and with identical material culture have been reported at significantly higher elevations. For example, Collier and Murra (1943:32) noted two settlements to the northwest, one situated at 3,200 m, the other at 3,400 m. Without knowing more specifics about the settings of those sites, it is difficult to assess why they are located at such high elevations, while those closer to Saraguro are not.

Fifth, the habitation sites of the late phase tend to be located farther south than those of the early Saraguro Period. A comparison of the north UTM coordinates for the mid-point of each habitation shows that settlements are on the average 680 m farther south in the late Saraguro Period. Excluding the multi-component sites, the shift to the south is far greater, at 2,320 m. While these numbers indicate that sites to the north were being abandoned in favor of new sites to the south, there were still sites that continued to be inhabited in the northern and central sections of the basin.

Furthermore, because a section of the northern half of the basin was not covered in the survey, this pattern may possibly be skewed as a result of sampling.

Non-ceramic Artifacts

The distributions of non-ceramic artifact types in the early and late Saraguro Period are listed in Tables 7-4 and 7-5. Artifacts of most types are basic in nature, with little elaboration in form or decoration. Larger sites were more likely to contain the greatest variety of artifact types; for most artifact types, this is no doubt due to the probability of encountering greater total numbers of surface remains as site area increases rather than representing differences in site functions. Most of these categories represent common domestic items except for the oversize grinding stones and tenoned sculptures, which may come from communal or ceremonial contexts. The majority of these artifacts appear to have been made from locally available materials. Descriptions of the forms and variations of major non-ceramic artifact types are given below, along with discussion of notable patterns relating to their distributions in time and space.

It does not appear that any of these artifact types were exclusive to the early Saraguro Period, and therefore hold little diagnostic potential. In contrast, the tenoned sculptures may have been restricted to the late phase, as the only early sites where they were found also included late Saraguro Period components, while the other three sites containing them were single-component late sites.

Domestic Ground Stone. The domestic ground stone artifacts of the region are for the most part of a rather generic, non-diagnostic nature. The most common forms are basin metates, followed by rough mortars. Manos are usually small one-handed types, with occasional two-handed varieties, and pestles were usually of a basic short

site number	site type ¹	metate	mano	mortar	pestle	oversize grinding stone	tenoned sculpture	obsidian	chert
2	lh				Х				х
3	rs								х
6	hh		Х			х			х
8	SS								х
9	hh								х
11	hh	х		Х		х		х	х
12	hh	Х		Х				Х	х
14	hh	Х	Х			х			х
15	hh	х	Х			х		Х	х
23	hh		Х						х
24	hh								х
25	lh	Х							х
26	SS	х	Х						х
28	hh								
29	hh					х		Х	х
31	hh								х
33	hh								х
34	hh	Х						х	х
35	hh	х	Х	х	Х	х	Х	Х	х
36	lh								
37	lh	Х		Х					х
38	hh	Х	Х						х
39	hh	Х	Х				х	Х	Х
40	hh	Х	Х					Х	х
41	lh	Х							Х
43	hh	Х					х		Х
44	hh								Х
Total		14	9	4	2	6	3	8	25

Table 7-4. Distribution of non-ceramic artifact types in the early Saraguro Period.

¹ hh = hilltop habitation, lh = lower habitation, ss = surface scatter, rs = rock shelter.

site number	site type ¹	metate	mano	mortar	pestle	oversize grinding stone	tenoned sculpture	obsidian	chert
3	rs								Х
4	hh	х	х						х
6	hh		х			х			х
9	hh								х
11	hh	х		х		х		Х	Х
12	hh	х		Х				Х	Х
14	hh	х	х			х			Х
21	hh		х	х	Х	х	х	Х	Х
22	hh	х					х		Х
24	hh								Х
26	SS	х	Х						Х
31	hh								Х
32	hh	х						Х	Х
34	hh	х						Х	Х
35	hh	х	Х	х	Х	х	х	Х	Х
37	lh	х		х					Х
38	hh	х	Х						Х
39	hh	х	Х				х	Х	Х
40	hh	Х	Х				х	Х	Х
42	hh	Х				Х	х		Х
43	hh	Х					х		Х
Total		15	9	5	2	6	7	8	21

Table 7-5. Distribution of non-ceramic artifact types in the late Saraguro Period.

 1 hh = hilltop habitation, lh = lower habitation, ss = surface scatter, rs = rock shelter.

cylindrical form, though many were broken such that long forms are not precluded. Rocker mill types of hand stones are also found within Integration Period sites. While this form was introduced by the Incas in many regions, it is still currently used in the Saraguro area, and so it is difficult to determine whether examples found on the surface date to pre-Inca, Inca, or more recent times. Likewise, the other basic forms of ground stone cannot be considered diagnostic of prehistoric sites, or of any particular sub-phase, with the possible exception of mortars and pestles. Those forms seem to be correlated with sites with late Integration Period components, though the correlation is not strong enough to conclude that mortars are diagnostic of the later period.

Oversize Grinding Stones. Oversize grinding stones were found at eight sites, six of which had early Saraguro Period components (Sar-6, 11, 14, 15, 29, and 35), and six of which had late components (Sar-6, 11, 14, 21, 35, and 42). All of these sites are hilltop habitations. One additional example was found isolated near where the Pan-American Highway exited the southern end of the basin near the southeastern foot of Cerro Puglla.

The oversize grinding stones are essentially large boulders that were unmodified except for their milling surfaces, and share some characteristics with the large grinding stones of the north coast of Peru, which are known as *batanes*. The examples seen in the Saraguro region were quite variable in size, ranging from 132 to 225 cm in length, 62 to 157 cm in width, and 30 to 56 cm in height. The largest such stone recorded, located in the community of Ilincho at the edge of the school courtyard, measured 225 cm long, 157 wide, and over 46 cm high, and had four large grinding basins. The form of the grinding areas on these stones also varied markedly. Some had simple flat ground areas that suggested limited use with a back and forth or

rocking motion. Others had basins as deep as 19 cm, implying more use, and the narrowness of some of these basins indicates a different grinding action was employed, perhaps a pounding motion as would be used in a mortar. In fact, the shape of some of these basins lands in the gray area between what could be readily classified as a metate or as a mortar. Most of the deep basins in these oversize grinding stones were eye-shaped, and, in fact, they are referred to as *ojos* ("eyes" in Spanish) by local people. The eye-shaped basins usually occurred in groups, from two to four per stone. One arrangement resembled a face with two eyes and a mouth. Almost all of the oversize grinding stones had more than one ground area, sometimes with flat and basin ground features on the same stone. A final variation had numerous deep cupules, of which only two examples were seen.

These artifacts occurred in small numbers, usually one or two per site, and were frequently situated on the upper terraces of the hilltop sites, if not on the summits themselves. Unfortunately, a number of these stones have been removed from their original locations by local people, either to serve as grinding stones in or near homes, or to facilitate preparation of agricultural fields. Others are still used for the grinding of folk medicines (L. Belote, personal communication 1996). Judging from the current situation, it is likely that these boulders did not naturally occur on the hilltops or slopes, and had to have been brought uphill, probably from the nearest river or *quebrada* where a suitable specimen could be found. This means that a great effort was required to transport these boulders hundreds of meters up steep slopes to be put into service.

The presence of oversize grinding stones does not seem to be confined to either of the sub-phases of the Saraguro Period, but is closely correlated with site size. Those habitations sites that contained them are mostly medium to large in size, and

the three largest sites, León Pugllana (Sar-35), Loma Huelemón (Sar-11), and León Dormido (Sar-15), all contained examples. The smaller sites of Huaylashi (Sar-29), at 2.1 ha., and Cuypamba (Sar-21), at 4.8 ha., were the exceptions.

While these stones were obviously used for grinding, it was probably not for domestic purposes. The small number of oversize grinding stones per site could not have been sufficient to meet the daily needs of the whole community; the more typical types of ground stone were available to serve on the household level. Furthermore, the amount of wear on the oversize stones is much lower than what would be caused by the constant use that would be needed to meet the demands of the community. The low use and the low numbers of oversize grinding stones along with their locations on the highest levels of habitation sites indicate a restricted usage. But the great effort needed to transport these stones uphill suggest an investment by a number of people, selected from perhaps kin groups or the entire community, rather than by individual families. The combination of restricted usage, community investment, and prominent location suggests these milling stones served some sort of political or religious function. They may have been status items for elite households, or the focus of public rituals.

Up to the present, this artifact type has gone virtually unnoticed within Ecuador, and its geographical spread is unknown. No oversize grinding stones have been reported from the French archaeological projects in central and southern Loja province, nor are they mentioned in earlier descriptions of the archaeology of the Saraguro region. But to the north of Saraguro, there are two similar stones reported in Cañari territory. One is located near the famous Ingapirca in the province of Cañar; Bedoya (1978:119-128) referred to artifacts of this type as *piedras de tacitas* ("rocks of small cups"). The stone he described had 27 distinct small basins or holes, which

is similar to two of the examples from the Saraguro region. The second example, described by Vernau and Rivet (1912:231-232, Plate XIV, Figure 1) was an interesting variation located near the town of Cañar. This *pierre a cupule* (rock with cupule) was 150 cm long by 120 cm wide, with a 25 cm wide depression in the middle. Its most unusual feature was an arc-shaped depression that runs almost the entire length of the rock, averaging about 35 cm in width. Vernau and Rivet (1912:232) suggested that this rock and others of the type were used as mortars or for games. They also mentioned similar stones elsewhere in the Andes that were used as recipients of offerings to ensure safe journeys, particularly at mountain passes, similar in function to *apachetas*. This last function might make sense for the two oversize grinding stones with multiple miniature basins, one of which was located at the southern exit from the basin near the Pan-American Highway at the foot of Cerro Puglla, and the other at the northern exit from the basin, at León Dormido, also near the Pan-American. Given the effort to haul these stones up hillsides in the Saraguro region, it seems rather unlikely that they were used for games.

Flaked Stone. Flaked stone was present at nearly every Saraguro Period site, including 25 of 27 sites with early components, and all 21 of those with late components. The vast majority of flaked stone found within those settlements was of chert, with some obsidian and the occasional flake made of chalcedony, quartzite, quartz, or basalt. The chipped stone found within Saraguro Period sites were almost exclusively unretouched flakes. Two bifacially-worked tools, probably projectile points, were found at Cochapamba (Sar-16), but those tools cannot necessarily be assigned to the Saraguro Period because the site yielded no diagnostic ceramics. Otherwise, a small proportion of the flakes found in the other sites showed scarring from utilization.

Flakes of chert were found scattered within habitation sites with no apparent patterning. The material varied in color from mustard yellow to orange, red, green, or brown, resembling the cherts of the Franciscan formation of California. No high quality sources of chert were located during the survey, only low quality outcrops, but judging from the geology of the area and place names such as Loma Pedernal ("Chert Hill"), there are likely to be sources of desirable chert within a day's travel of the sites within the basin.

Obsidian was the second most common material for flaking in the Saraguro Period sites, being present at ten sites, eight with early components, and eight with late components. The presence of obsidian did not appear correlated with site size, but hilltop habitations were the only type of site where the material was found. Obsidian was found in much smaller quantities than chert, and tended to be found only in the uppermost terraces of the hilltop settlements; at times it was only revealed through trowel probes. Obsidian was almost always found in the form of small flakes, sometimes accompanied by small pebbles that were unworked or had a few flakes removed. The greatest number of obsidian pebbles, mostly unmodified, was found at the hill León Dormido (Sar-15), suggesting that the site may be a source of the material, albeit of only limited quantities of small size stones. As mentioned in Chapter 3, Temme (1982) described a similar source of obsidian about 30 km from the town of Saraguro, to the north of Loma Cubilán. The nature of the obsidian found during the survey indicate that the material was not being brought into the region in large pieces or quantities. Sourcing of samples in the future may be able to clarify whether any obsidian comes from known major sources in Ecuador, or is strictly of local origin.

The flaked stone of the region shows little diagnostic potential, because of the
lack of finished tools, and because there do not appear to be any significant changes in distributions of materials from the early to the late sub-phase of the Saraguro Period. The nature of the chipped stone artifacts indicates expedient usage for basic tasks, such as cutting and scraping. The probable use of local materials suggests that there was no long-distance trade in raw lithic materials.

Tenoned Sculptures. One of the most notable artifact types found in Saraguro Period sites is the tenoned sculpture (Figure 7-11). They are carved from carved from soft stone with little embellishment, and are found in two basic forms: the llama head and the "mushroom." The llama head sculptures sometimes resemble a rounded foot or shoe, and others have a hole carved all the way through to represent the eyes. The mushroom form is essentially a flat disk on a short tenon; the disk or stool part of the mushroom could vary in diameter from roughly 50 to 200% greater than the diameter of the tenon, so that the ones with the smaller heads more closely resemble column capitals. All variations of this artifact type are distinguished by having a tenon in the form of a cylindrical projection, which, when found unbroken, has either a flat or a tapered rounded end. One example had flat areas on four sides. The tenons were oval to round in cross-section, and measured from 15 to 22 cm in diameter, and up to 48 cm in length. In most cases, the tenoned sculptures found during the survey were broken, missing either the tenon or its head; intact examples were frequently collected by local residents.

Unfortunately, this artifact type was not recognized until about half-way through the present survey because of their unembellished forms, and because the presence of tenoned sculptures had not been previously reported in the Saraguro region. Thus, it was not observed whether tenoned sculptures were present in the first twenty sites. Even the first specimens recognized, those at Cuypamba (Sar-21), were

only broken tenons piled into a field wall with other stones. Furthermore, the distribution of tenoned sculptures is not fully representative because many of the intact examples have been collected by locals, who have noted their unusual nature.



Figure 7-11. Tenoned sculpture from León Pugllana (Sar-35).

With these limits on the data set, the recorded distribution is as follows. Evidence for tenoned sculptures was found at seven sites within the survey area (Table 7-6), and in one site outside the project boundaries, Sar-45; all of these were hilltop habitations. They varied in observed numbers from one to three per site to the more than two dozen broken or whole examples seen at León Pugllana (Sar-35). The tenoned sculptures were usually encountered on the upper terraces, and sometimes on the summits, of medium to large size settlements. The tenoned sculptures seem to be a late Saraguro Period phenomenon. Of the eight sites where these artifacts were noted (including Sar-45 outside of the survey area), four contained late Integration Period ceramics exclusively, while three had both early and late components. Just one site, Sar-39, had ceramics from only the early sub-phase. A late sub-phase date for tenoned sculptures in the Saraguro region is consistent with the examples found at the Ingapirca of Cañar (see below), where they are associated with Cashaloma artifacts, placing them in the late Integration Period, and possibly into the Inca Period. The tenoned sculptures found at Sar-39 may mean that tenoned heads also date to the early sub-phase, but it is also possible that the site was occupied during the late Saraguro Period but the survey did not recover diagnostic artifacts from that phase. Because few diagnostic ceramics in total

site	area (m ²)	sub-phase(s)	elevation (m)
35	916,100	late, early	2,590
42	261,800	late	2,700
40	156,200	late, early	2,670
43	134,500	late	2,800
39	73,500	early ¹	2,720
22	50,400	late	2,670
21	48,300	late	2,700
45^{2}	n/a	late	2,900

Table 7-6: Sites with tenoned sculptures.

¹ This site is likely to date to the late sub-phase as well: see text.

² Sar-45 is located outside of the survey zone.

were collected at Sar-39, I am inclined to accept the latter argument, and thus Sar-39 is being considered as dating to both the early and late sub-phases in this analysis.

As with the oversize grinding stones, similar artifacts are known from Cañari territory; this sculptural form has not been reported from any other location in Ecuador. The published examples come from the Ingapirca of Cañar, where tenoned heads have been found in two sectors with materials corresponding to the Cañari occupation of the site. Twenty-three of the sculptures, referred to as *cabezas-clava* ("keyed heads") or *piedras zoomorfas y ornitomorfas* ("zoomorphic and ornithomorphic stones"), were found in the Pilaloma sector of the site (Cueva 1970, in Fresco 1984b:22), and others were located in the La Condamine sector (Alcina Franch 1978:138). The tenoned sculptures from the Pilaloma area were said to represent the heads of animals and birds, specifically llamas and condors, and were probably located on the upper portions of exterior walls. In addition to llamas and condors, Bedoya (1978:84) noted that some of the tenoned sculptures of Ingapirca depicted snakes. He also mentioned an early account of the site from 1692, which referred to fantastic animals in relation to the architecture of the site, which suggests that tenoned heads were still intact in at least some walls at the time. This also implies that they had remained in place during the Inca occupation of Ingapirca, most likely within the original Cañari sectors. As currently preserved and restored, there are no tenoned sculptures on the walls of the buildings of Inca cut-stone architecture at the site.

The similarities in form and the contemporaneous dates between the tenoned sculptures from Ingapirca and those in the Saraguro region leave little doubt that the artifacts from both areas are of the same type and function. The main differences between the forms as seen in the two regions are in the level of detail and the shapes

represented. The Saraguro tenoned sculptures were nearly unembellished, and stylized to the extent that it was difficult to identify them without knowledge of the much more detailed examples from Ingapirca. The llama head form is seen in both areas, while condor and snake types are only known from Ingapirca, and the "mushroom," which is a more abstract form not easily attributed to any animal shape, is distinct to Saraguro.

The use of tenoned sculptures has a long history in the Andes, with perhaps the most famous examples being those from Chavín de Huántar, dating to the Early Horizon of Peru. Later examples from the Early Intermediate Period are known from Tiwanaku near Lake Titicaca, and the Recuay culture on the Central Coast of Peru. Many, if not all, of those tenoned sculptures have been found in the context of ceremonial buildings. This was certainly the situation at the Ingapirca of Cañar, where the tenoned heads were found in the central and most important sector of a large ceremonial and political center. Cueva (1970, in Fresco 1984b:22) likened the Ingapirca sculptures to gargoyles, minus the drainpipe function, and held that they served symbolic or aesthetic purposes. It is highly likely that the tenoned sculptures of the Saraguro served the same purposes as those of Ingapirca, which is supported by the location of tenoned sculptures within the highest precincts of larger Saraguro Period sites, and their low numbers per site.

Stone Axe and Mace Heads. No stone axes or mace heads were found during the survey, although they are reported to be common in the Saraguro region. The lack of surface examples is no surprise given that axe and mace heads are easily recognized as unusual artifacts and quickly collected by local people. A number of these collected specimens were shown to us during the survey, but provenience was usually unclear, so little can be said of their distribution in time or space.

Bronze Axe. A remarkable decorated bronze axe (Figures 7-12 and 7-13) was shown to us by a family from Las Lagunas, and although it was not collected during the survey, it is worthy of mention. The axe measured approximately 13.7 cm wide by 13.3 cm long, and roughly 3 to 4 cm thick, and featured designs made from a combination of engraving and cut-outs. The blade contained a line of five engraved double-swirl elements underlined by a straight line with a swirl on each end. The shaft held two symmetrical human figures, with engraved features on their faces, feet, and hats, and cut-out sections to their sides and between their legs.

This object is significant because it is decorated with more detail than any other object from this period recovered during the survey, and because it is the most



Figure 7-12. Decorated bronze axe, reportedly from Tintaturo (Sar-46).



Figure 7-13. Design of decorated bronze axe, reportedly from Tintaturo (Sar-46).

finely made. What is even more significant is that it seems to be a very standardized artifact type that is specific to the greater Saraguro region (i.e., northern Loja province and part of southern Azuay province), as shown by the examples from various collections recorded and published by Mayer (1992). Although Mayer's provenience information for his examples were often vague and probably inaccurate in some cases, it is clear that they are centered around the area defined by the ceramics of the Saraguro Period. Bronze axes of a wide range of types were common in the central Cañari territory of Azuay and Cañar provinces, but this design appears to be unique to the Saraguro Period. The example seen during this survey was reported to come from the Quebrada Honda area (see below), likely from the large hilltop habitation at Tintaturo, which contained late Saraguro Period artifacts. The standardization and distribution of this bronze axe form are also the only strong indication of a level of craft specialization in the Saraguro region during the Integration Period.

Undated Sites and Features

There were several sites (Figure 7-14) that yielded no diagnostic artifacts and were located outside of or on the edge of the survey zone. However, they represent distinctive site types that may have played important roles in the late prehistory of the region, and thus merit mention.

Quebrada Honda. The most enigmatic site in the region is composed of architectural features on the slopes of the canyon of Quebrada Honda, which is located to the southwest of Saraguro. Situated on the middle slope of the large ridge that forms the western side of Quebrada Honda, the site encompasses two sets of structural remains, which appear to be the rubble of walls made of rough field stones.



Figure 7-14. Undated sites and features of probable late prehispanic date.

The walls form a compound of contiguous chambers arranged in a very irregular pattern (see Figure 7-15). The main long walls are mostly continuous, running up and down the hill slope, while the shorter, somewhat disjointed walls run perpendicular to the slope. The intersecting walls form irregular, primarily quadrilateral chambers, the lower ends of which form a sort of terrace that becomes the upper inner wall for the next chamber downhill.

The architectural features of Quebrada Honda have only recently been revealed by the clearance of the heavy covering of vegetation to create pasture. The northern sector has been completely exposed, and was roughly mapped during the project. The southern zone had only been partially uncovered, so much less information could be recorded there. The northernmost set of structures measured approximately 90 m by 75 m, with the long walls running up to 70 m in length. The chambers measured from as small as 3 by 5 m to as large as 18 by 7 m. The structures in the southern sector are similar in arrangement, but cover a much larger area.

The entire site is located down slope from a very large Saraguro Period site, Tintaturo, which occupies the top and the western slope of the ridge. However, no diagnostic artifacts were found at Quebrada Honda, and the layout and location of the site have no counterparts in the other archaeological sites visited in this project, leaving its date, function, and cultural affiliation unclear.

A few reported sites elsewhere in the southern highlands of Ecuador do have some superficial similarities to Quebrada Honda. For example, remains of Inca structures in the main stretch of the Río Jubones, especially those of Las Minas, have long, contiguous, rectangular chambers of rough field stone walls. Yet, as described by Uhle (1923:11-12), they are much more regular in plan, and the main chambers run



Figure 7-15. Quebrada Honda, northern sector.

perpendicular to the slope along long terraces, rather than up and down the slope as at Quebrada Honda. Uhle characterized the Jubones sites as agricultural works of the Incas, complete with irrigation canals. Given the hot climate of that zone and the ethnohistorical data relating to the area (Arias Dávila 1582, in RGI 1897:180), it is probable that those terraces and associated structures were used to grow coca. The difference in climate and layout of Quebrada Honda make it very unlikely that it was constructed by the Incas for such a purpose. In fact, it is difficult to envision the features of Quebrada Honda serving any agricultural purpose at all.

Not far from the Río Jubones ruins, the site of Rompe was described by Vernau and Rivet (1912:106) as having a very irregular plan of linear walls made of rough field stones. While its rough plan shows few interior chambers, the disorderly layout is the closest analog to Quebrada Honda in the southern highlands. Unfortunately, the cultural affiliation and function of Rompe are also unknown. Further south in the province of Loja, the ruins of Valle Hermosa in the Catamayo Valley comprised a "large stone-walled structure, 650 meters long by about 500 meters wide" (Collier and Murra 1943:29), divided into long, narrow stalls, and resembling the compounds in the Río Jubones. Based on this description, Valle Hermosa appears more akin to the Inca agricultural works in the lower Jubones than to the structures of Quebrada Honda.

It is certainly not a typical Saraguro Period habitation site, nor does it resemble any sort of Inca administrative or storage facility. Instead, it may be that Quebrada Honda's function was military in nature. Local people have reported finding a number of star-shaped mace heads in the vicinity of the wall remains, and the construction materials and planning suggest a site constructed rapidly and occupied briefly. The plan of Quebrada Honda does bear some resemblance to

portions of a large military site on the Peruvian coast, Inkawasi, which was quickly built and only utilized for a few years (Hyslop 1985, 1990). While the central compound and other sectors of Inkawasi are quite rectilinear in plan, there are several zones of rather irregular layout, reminiscent of Quebrada Honda. If Quebrada Honda was such a site, it would certainly affect our understanding of the Inca conquest of the Saraguro region, and of Inca military practices in general. But as it stands, an earlier or later date for the construction of Quebrada Honda cannot be ruled out.

Corrals. Several corral features were noted on the eastern periphery of the survey region (see Figure 7-14). They were seen in three locales: Huaylashi, to the east of Oñacapac; to the northeast of the community of Turucachi; and in the El Tambo region to the east of Turucachi. The corrals consist of roughly circular enclosures made of thick walls of rough field stones, possibly with mud mortar, and they range in diameter from about 10 m up to 100 m. The largest corral was located in Huaylashi; it encloses a spring and is associated with a set of external linear wall remains.

Unfortunately, no diagnostic artifacts were encountered on the surface at any of the corrals, or within trowel probes. However, there were some chert flakes found at Huaylashi, suggesting a prehistoric date. The soil within that enclosure was black and very organic in composition, consistent with sustained use for corralling animals, which, if a prehispanic date holds, must have been camelids. Practically nothing is known about the use of llamas and alpacas in prehistoric or early historic times in the Saraguro region, and they have disappeared from the local landscape, except for the few pets usually kept in the municipal soccer stadium. Camelids were certainly present during the Inca occupation, but the llama head-shaped tenoned sculptures of

the late Saraguro Period may well mean they played an important role in pre-Inca society as well.

DISCUSSION: CONDITIONS BEFORE THE ARRIVAL OF THE INCAS

Although the survey results have their limitations, when combined with information from ethnohistory and previous archaeological research in the southern highlands, they do allow for the assessment of many of the conditions pertaining in the Saraguro Basin in the late pre-Inca era. In particular, light is shed on the ethnic affiliation of the pre-Inca inhabitants of the region, and their socio-political and ceremonial organization, and to a lesser extent on their economic system, and their readiness for warfare.

Ethnic Affiliation of Pre-Inca Inhabitants

As discussed in Chapter 4, the ethnic affiliation of the pre-Inca inhabitants of the Saraguro region has been uncertain. Many ethnohistorical sources place Saraguro within "Palta" territory, hence many general archaeological and historical works follow that line. However, a few other accounts imply that it may have been a Cañari region; the artifactual data from this project support this latter affiliation, insofar as material culture can indicate ethnic connections. A Cañari link is indicated by three major artifact types found within the Saraguro region.

First, the Saraguro Period ceramics share little with the presumed "Palta" wares from further south in the province of Loja, such as those from Catamayo and the area around the city of Loja, as described by Almeida (1983, 1987) and Guffroy (1980, 1983c, 1987d). Although the Saraguro pottery lacks the decorated forms and finewares that typify the contemporaneous Tacalzhapa and Cashaloma styles of Cañar

and Azuay provinces to the north, the basic forms and treatment of Saraguro wares share much with the Thick Ware pottery of those regions, to the extent that they could be considered a variant rather than a separate style. Many archaeologists familiar with ceramics of the southern highlands categorize the Saraguro wares as Tacalzhapa or Cañari Thick Ware, although nothing definitive has been published to that effect.

Second, counterparts to the *batanes* of the Saraguro Basin have been found to the north, but not to the south in "Palta" territory. While published examples from Cañari lands (Bedoya 1978:119-128; Vernau and Rivet 1912:231-232, Plate XIV, Figure 1) are rare and vary in form, they are close enough in essential character to the Saraguro examples to leave no doubt that they are of the same artifact type.

Third, the tenoned sculptures are found in Saraguro and Cañari lands, but not in the "Palta" area. Again, the manifestations of this artifact type differs. The examples known from the Ingapirca of Cañar are more detailed than the plainer Saraguro forms, yet there is no denying their connections in both type and placement in time.

In addition, there is some linguistic data to support a Cañari affiliation. In an analysis of non-Spanish toponyms in the southern highlands of Ecuador, the Belotes (J. Belote and L. Belote 1994b) have found that distributions of toponymic elements show clusters that more often group the Saraguro region with Azuay and Cañar provinces than with lower Loja province. While many aspects of place names may be derived from Quichua or *mitmaqkuna* languages, it is likely that at least some preserve pre-Inca elements, implying a Cañari connection.

The survey data from this project suggest the appearance of substantial settlement in the Saraguro Basin later in prehistory,¹ which can be interpreted as a southward movement of people out of main Cañari lands sometime after about A.D. 500. The large expanse of *páramo* to the north of Saraguro and the deep, dry Río Jubones may have served as natural barriers between the two populations, and hundreds of years of relative isolation could have led to social and cultural divergence, perhaps to the extent that the people of the Saraguro region were considered an ethnically distinct group upon the arrival of the Incas. These people may in fact correlate with the ethnic group Caillavet (1987, 1989) refers to as the Chaparra and places in the northeastern section of "Palta" territory that contains Saraguro.

As discussed in Chapter 4, the term "Palta" itself appears to have little validity as a designation for any kind of cohesive cultural or ethnic group, and may be nothing more than a catch-all term employed by the Incas, perhaps derisively, to refer to a loosely linked set of ethnic groups inhabiting the southernmost highlands of Ecuador. While most evidence points to the people of the Saraguro region being related to the Cañaris, it is still quite conceivable that at the time of the Inca incursion they had formed political or military alliances with their "Palta" neighbors to counter the advancing Inca threat; this could explain why they became linked in later accounts with the "Paltas."

¹ While the earlier periods are not treated here, the survey only encountered a few sherds with characteristics that could date them prior to the Integration Period. However, outside the project area and within significantly different environmental zones, the Belotes have found artifacts and sites with pre-Integration Period dates (see Chapter 5).

Socio-Political Organization

The survey revealed little in the way of standard indicators of sociopolitical complexity; there was a decided lack of monumental architecture, high quality craft items, and exotic goods. Excavation may be the only way in the Saraguro area to evaluate many other indicators, such as differentials in the quality of residences and grave goods. As a result, site size hierarchy and a single artifact type are the only currently available means for assessing the sociopolitical organization of the Saraguro region.

Because the lack of architectural remains on the surface of Saraguro Period sites rules out gauging habitation density with the present survey data, it is not feasible to derive population estimates for analyzing settlement patterns. However, assuming the same residential density and using site sizes in lieu of population estimates can still be useful for comparing the habitation sites and the roles they may have played in a settlement system. While it can be problematic to assume a uniform density of habitation when comparing sites of different types, a good relationship between site size and population is possible when site type is controlled (Schreiber and Kintigh 1996:578). Because the Saraguro Period habitations do not differ dramatically in nature, except for some variations in topography, the correlation is likely to be fairly strong for these data.

This examination of site size hierarchies focuses on the settlements with evidence of significant, sustained occupation, i.e., the hilltop and lower elevation habitations; surface scatters and the rock shelter are excluded. However, because the survey conditions (see Chapter 6) precluded defining the boundaries of occupation for each phase of the multi-component sites, the analysis must utilize the same site size figures for both early and late phases. These numbers obviously represent the greatest

extent of use, which undoubtedly changed over time. Also of concern is that the long time frame encompassed by the early and late phases raises the question of contemporaneity within each period. However, the depths of deposits at many sites indicate lengthy occupations, such that it is not unreasonable to assume most settlements in each period were inhabited contemporaneously.

Early Saraguro Period. The 24 settlements of the early Saraguro Period exhibit a wide distribution in sizes (Figure 7-16). There is a clear group of two sites at the high end, Sar-11 and Sar-35, which measure 74.1 ha and 91.6 ha, respectively. The remaining 22 settlements are more evenly distributed, and do not show clearly defined size groupings with marked breaks between them. The greatest gap is between the tenth and eleventh largest sites (Sar-43 and Sar-24), where there is a jump in area of 64%, from 8.2 ha to 13.5 ha. Grouping the sites using this as a separating point produces a second-order group of seven sites that vary from 13.5 ha to 27.6 ha in area, and a third-order grouping of 12 sites that measure from 2.1 ha to 8.2 ha. At the low end, there are two sites significantly smaller than the rest: Sar-2 and Sar-9, at 0.12 and 0.2 ha, respectively. These two were likely limited in function, population, or duration, and due to their low numbers and small sizes, probably had little significance in the local socio-political organization, playing only minor roles in the settlement system of the basin.

The third largest site, León Dormido (Sar-15), is something of an anomaly. At 43.0 ha in size, it lies between the medium and large sites. It is 56% greater in area than the largest second-tier settlement, while the smaller of the first-tier sites is 72% larger. The situation changes when one takes into account the feature that makes the hill of León Dormido unique: the great rock outcropping from which its name derives. While it was not possible in the field to reliably gauge the portion of

inhabitable land of each site, León Dormido, owing to its rock formation, easily encompasses more uninhabitable land than any other site in the basin. Thus, the site may be more appropriately placed within the group of second-tier settlements.



Figure 7-16. Settlement sizes of the early Saraguro Period.

This breakdown yields three main habitation size groupings, with 2 large, 8 medium, and 12 small settlements, along with one group of 2 very small outliers. This suggests a three-tiered socio-political hierarchy, with two large sites exerting a level of socio-political dominance over the lower-order sites. The rank-size plot of the habitation sites (Figure 7-17), with its uneven, convex shape, further indicates the region was not highly centralized. The distribution of the sites in the landscape suggest two chiefdom-level political groupings defined by major water courses that served to separate the two first-tier sites and their subsidiary settlements. To the west of the Río Oñacapac and the Río Paquishapa lay the territory of Loma Huelemón (Sar-11), along with five second-tier settlements and nine third-tier sites. To the east of those rivers lay León Pugllana (Sar-35), grouped with three habitations each of

second-order and third-order sizes. Although it appears that most, if not all of the sites under Loma Huelemón were recorded during this survey, it is likely that some additional sites within the political territory of León Pugllana were missed due to the limits of the survey coverage.



Figure 7-17. Rank-size distribution of early Saraguro Period settlements.

Late Saraguro Period. Although there were five fewer sites in the settlement system of the late phase of the Saraguro Period, their size distribution (Figure 7-18) points to a two-tier hierarchy not unlike that of the early phase. The two largest sites from the early phase, León Pugllana (Sar-35) and Loma Huelemón (Sar-11), continue to be occupied and remain the largest sites recorded in the basin, at 74.1 ha and 91.6 ha, respectively. With the abandonment of León Dormido (Sar-15), the third-largest site during the early Saraguro Period, the highest tier is more sharply defined. The

increase from the smaller of the first level settlements and the next largest site is a jump of 179%. Below the first tier are 16 sites, ranging in size from 3.4 ha to 27.6 ha. There is also one very small site, Cuypamba (Sar-9), with an area of 0.2 ha; as in the early phase, it is unlikely that such a small site played any significant role in the socio-political organization of the basin.



Figure 7-18. Settlement sizes of the late Saraguro Period.

Also similar to the early Saraguro Period situation, it is unclear how the medium sized sites might be grouped. For example, they could be broken down into 3 smaller groups, of six sites of 3.4 ha to 8.2 ha, five of 12.6 to 17.8 ha, and five of 23.1 to 27.6 ha. Alternatively, the five sites in the middle could be lumped with either the smaller or larger sites. By using the same dividing point as in the early Saraguro Period (between Sar-32 and 24), a secondary tier of ten sites, and a tertiary one of six are produced. The picture is further clouded when considering that Sar-37 is very likely an extension of Sar-43. Combined, those two sites would be pushed out of the smaller groupings and into the 25 ha size range. In the end, there is no compelling

argument in favor of grouping these sites via any of these given schemes.

The tenoned sculptures found in many late Saraguro Period sites sheds a little additional light on the local socio-political system. Within the Cañari sector of the Ingapirca in Cañar province, these artifacts served to embellish some of the most important buildings within a site that was a major political and ceremonial center in the late Integration Period. Use of tenoned heads in ceremonial buildings is also part of a wide-spread patterns in earlier Andean societies. This type of sculpture undoubtedly served the same functions in the Saraguro Basin, implying that many sites possessed at least one structure of political and/or ceremonial import. Because these artifacts were found at both large and small sites, it is likely that political control and/or religious practices (which are usually intertwined) were not highly centralized, although the very high numbers of tenoned sculptures at the largest site in the survey zone, León Pugllana (Sar-35), suggests increased importance on the same scale as its size.

Overall, the settlement hierarchy seems only mildly changed from the early phase. The basin was still not politically unified, and probably remained divided into two chiefdoms that may have been defined by the major watercourses and controlled by the same two sites. One could argue that there were three levels in the political hierarchy reflected in the site size distributions, but it is more reasonable to presume there were only two given the undifferentiated nature of the settlements. The most notable changes were the abandonment of the third largest site, and the reduced number of settlements within the survey area, which is reflected in the low numbers of sites of smaller size. In all, the changes suggest a consolidation of the power of the two largest sites, and a move toward larger settlements. The convexity of the ranksize plot of habitations (Figure 7-19) also indicates that the basin was still not highly

centralized in the late Saraguro Period, but the unevenness of the curve also hints at a consolidation of control at the two largest sites.



Figure 7-19. Rank-size distribution of late Saraguro Period settlements.

Economics and Infrastructure

The survey data point to an unspecialized local economy of sedentary agriculturalists, with a subsistence focus little different from that prevalent elsewhere in the Andean highlands. It is uncertain whether llama and alpaca herding was practiced in the region at this time, although it is possible given the camelid head tenoned sculptures and the undated corrals seen within the basin. There were few indicators of economic specialization, e.g., no processing, collecting, manufacturing, or other special-purpose activity areas were identified either as independent sites or zones within settlements. The quality of preserved artifacts suggest little in the way of craft specialization, although the bronze axes known from the area, which probably date to the late Saraguro Period, indicate some specialization in metalworking. There may have been some limited long-distance exchange, as suggested by the presence of one *spondylus* shell fragment at Las Cuevas, and the obsidian flakes found at a number of sites.

There were no obvious signs of agricultural intensification that would have led to a significant surplus in production, i.e., no large-scale agricultural terraces or irrigation works associated with the Saraguro Period settlements. While the hilltop habitations contained many terraces, they were more likely house terraces than communal land improvements aimed at increasing agricultural production. There were no signs of roads, bridges, or other infrastructure that could be dated to the period. Paths and bridges were undoubtedly constructed to facilitate travel in the area, but they were probably not of elaborate or durable construction.

Ceremonial Organization

By the late Saraguro Period, the ceremonial organization of the basin appears to have both community-based components and a regional focus on major features of the landscape. At the community level, the structures decorated with tenoned sculptures may have been the locus of centralized ritual activity within each settlement. This may have also been the case with the *batanes*, which were often located at the highest level within hilltop habitations.

On the regional scale, it is almost certain that the major peaks in the area, Acacana and Puglla, played a significant role in the local religion. Puglla, at 3,339 m, dominates the Saraguro basin, while Acacana is prominent in the San Lucas area to

the south, and is the taller of the two at 3,429 m. Unfortunately, this survey only encountered some non-diagnostic chert flakes on the summit of Puglla, and the attempt to scale Acacana was unsuccessful, so there is no direct evidence linking the two mountains with the Saraguro Period. However, ethnohistorical sources (see Chapter 4) are more enlightening, with a reference to Acacana as the pacarisca or *pacarina* (sacred place of origin) of the "Paltas," and an account of the persisting sacred nature of Puglla in the Spanish colonial period. In the present, the two are considered a male/female pair. Puglla, which is a massive hill with multiple peaks, is considered the male mountain, while Acacana is the female of the pair (Belote 1984), with its two peaks called the mother and baby (Mama Acacana and Guagua Acacana). Considering the widespread manifestations of the concept of duality in Andean prehistory, it is likely that the male/female pairing of these mountains originated in the pre-Inca era. Puglla also is also associated with rain and water, both in the present and in Spanish colonial times,² a connection that likewise may have pre-Inca roots. One site dating to the early Saraguro Period, Sar-8, may have been a sort of ceremonial or offering site dedicated to Puglla, being a hilltop surface scatter located on a knoll formed on a spur of the mountain. The view of Puglla from that site is quite imposing, so it is unusual that the site was not utilized in the late Saraguro Period.

Views of sacred parts of the landscape were important considerations in site planning for the Incas, factoring into ritual practices, and they may have been

² There is a small *laguna* situated at the base of Puglla about which many stories are told regarding its magical nature. One man showed the survey crew a canal dug from the *laguna*, from where he said water refused to flow, even though it appeared to us the canal led down slope. The known ethnohistorical reference to Puglla (Recio 1948 [1773]:347) focuses on a ritually significant stream coming down from the mountain where the locals would make "prophecies and predictions."

important elsewhere in the Andes in earlier periods. This was probably the case in the Saraguro region, as many of the settlements dating to the Integration Period have views of Puglla and/or Acacana, although far fewer sites had views of the latter due to its more distant location in the next drainage to the south. Interestingly, almost every habitation site has a direct line of sight to the hill of León Dormido, while the taller and far more massive Puglla was visible from notably fewer sites. There are no known ethnohistorical references to the León Dormido, even though it is a very remarkable rock formation that does actually resemble a lion in repose, as its name implies. Considering its unusual nature, its potential as a source of obsidian nodules (see Chapter 3), and its visibility, León Dormido was probably the most important feature of the region's sacred landscape. There was also a significant settlement surrounding the landform during the early Saraguro Period, Sar-15, and its location and function were undoubtedly influenced by León Dormido's ceremonial significance.

It is likely that the nature of the sacred landscape changed little during the Integration Period. But it appears that ceremonial practices shifted from the early to late phases, as suggested by the abandonment of two early Saraguro Period sites of ritual significance: the settlement surrounding León Dormido (Sar-15) and the presumed offering site near Puglla (Sar-8). Further changes are indicated by the appearance in the late phase of tenoned sculptures and the *compotera* ceramic form, the former signaling public buildings with likely religious functions, and the latter being a vessel type commonly associated with rituals. These changes point to a consolidation of ceremonialism within individual settlements, with a concentration of some ritual activities within restricted areas.

Concern for Warfare

Several lines of evidence point to a concern with warfare during the Saraguro Period; the primary indications come from the settlement patterns. Foremost, the settlements were predominately established in hilltop locales, where steep slopes made for difficult access and better defensibility and high elevation provided excellent visibility of the surrounding countryside. That habitation sites avoided the more open and accessible land that was abundantly available at lower, flatter elevations strongly suggest that the defensible traits inherent in hilltop locations were considered more advantageous. In fact, many of the hilltop habitation sites presently have names such as Pucara or Loma Pucara, "pucara" being the Quichua word for "fort."

A number of changes in settlement patterns indicates an increased concern for warfare during the late Saraguro Period. The preference for hilltop locales is even more evident in the late phase, when lower elevation sites were essentially abandoned. There was a related trend toward establishing new habitation sites at higher altitudes in the late Saraguro Period (as opposed to ridge and hill tops at lower elevations), where land was even less accessible. The change in the settlement size hierarchy to fewer and larger sites implies a move toward political or tactical consolidation, perhaps in response to a perception of increased threats. In addition, the shift of site locations toward the south of the Saraguro Basin during the late phase suggests a reaction to threats from the north.

The artifact data from this survey contribute little to this picture. But the common occurrence of stone mace heads in the region, which are frequently collected by rural residents (thus lowering the likelihood of being observed in a pedestrian survey), imply preparation for warfare. While the provenience and date of these items

is uncertain, it is highly likely they come from the Saraguro Period settlements, although it can be debated whether they reflect concern with violence through the whole period or only to counter the advancing Inca threat. Whether or not armed conflict prevailed during the Saraguro Period, concern with warfare increased in the late Saraguro Period, indicating the local inhabitants were definitely primed to resist the Inca incursion.

Summary

In brief, it appears that the Saraguro Basin was not politically unified during the Saraguro Period, but organized instead into at least two complex chiefdoms, perhaps competing with one another or forming alliances as necessary to defend against (or attack) outside groups. The majority of the people in the region were living in terraced hilltop habitations, which tended to be large in size, probably because they included substantial tracts of agricultural fields. The local economy was undoubtedly agriculturally based, with little craft specialization or long-distance trade. Major features of the landscape, such as Cerro Puglla, Cerro Acacana, and León Dormido, likely played key roles in the local religion, and ceremonies were probably conducted at central structures within the medium to large habitations sites. Although there were no major changes in the region between the early and late phases, there were some notable shifts in settlement patterns, namely the abandonment of lower elevation habitations, occupation of fewer and larger sites, and a tendency for establishing new settlements at higher elevations and in more southerly locations. These changes may be tied to a gradual consolidation of political control under fewer and larger sites, and an increasing concern for warfare in the late pre-Inca era. Over

all, the circumstances of the Saraguro Basin during the Integration Period were not unlike conditions prevailing in much of the Andes in late pre-Inca times.

CHAPTER 8: THE INCA PERIOD (CA. A.D. 1460 TO CA. A.D. 1534)

This chapter presents the survey data relating to the settlements, architecture, and artifacts dating to the Inca Period occupation of the Saraguro region, and discusses what those data reveal about the Inca tactics for conquest and consolidation of control over the area, how resettlement may have been revealed in the archaeological record, and what role forced relocation played in the overall Inca strategy. The short duration of the phase undoubtedly produced only shallow deposits in most locales within the survey area. Because of that and the propensity for local people to collect distinctive or decorated artifacts, materials dating to the Inca Period were not abundant on the surface, although the architectural remains of Inca imperial sites were readily visible.

Sites dating to the Inca Period comprise two groups: *imperial Inca sites*, which include those showing artifactual or structural remains indicating a direct Inca affiliation, and *non-Inca sites*, which consist of habitations containing artifacts that can be dated to the Inca period, but no evidence of serving as imperial installations. A total of four imperial Inca sites or features were recorded within the survey area, along with two non-Inca sites (Figure 8-1). Three additional imperial sites located in the next drainage to the south (two of which were visited during the project) are included to build a broader perspective on the Inca occupation of the greater Saraguro region.

IMPERIAL CENTERS

The two imperial centers visited during the survey are Villamarca, (Sar-18), and Tambo Blanco (Sar-47). Villamarca is located at the north end of the survey area, while the better-known Tambo Blanco is located in the Las Juntas drainage to the



Figure 8-1. Inca imperial sites and local sites with Inca-style ceramics.

south. Because the latter is located outside the survey, it was visited only briefly¹ and not fully recorded. However, previous investigations have provided enough information on the site to compare it with Villamarca.

Villamarca

Villamarca is located on the north end of the basin near León Dormido on a gentle slope that descends westward from the base of the ridge known as Filo de Huaca, at an elevation of about 2,680 m. There is no doubt from its placement at the north entrance to the Saraguro Basin and location along the Pan-American Highway that Villamarca was located along the main north-south Inca road. It is undoubtedly the site mentioned by Caldas (1912), Cevallos (1986 [1886]), González Suárez (1969 [1890-1903]), Vernau and Rivet (1912), and Uhle (1923), under various names including Paquishapa and Villamarca. Currently, it is more commonly known as Paredones. It is also possible that this is the place the Spanish chronicler Cieza de León (1984 [1553]) called Las Piedras, although there is some doubt raised by his geographic details (Vernau and Rivet 1912; also see Chapter 4). No other reference in the ethnohistory to a site called "Las Piedras" has yet surfaced.

The total extent of the site is difficult to characterize because of a combination of soil formation, modern usage for habitation, agriculture, and pasturage, and the construction of the Pan-American Highway. However, there is an easily distinguished core area (Figure 8-2) composed of three separate sets of structures, within an area of approximately 5.5 ha. The visible architectural remains consist of collapsed *pirca*

¹ The project team visited Tambo Blanco in conjunction with a procession and ceremony held by one of the Saraguro indigenous political organizations to commemorate 500 years of indigenous resistance. It would not have been appropriate to collect artifacts or make detailed notes in those circumstances.





⊠ isolated worked stone

Figure 8-2. Plan of the Inca center of Villamarca.

(walls of rough or partially worked field stones set in mortar). The level of surface exposure varied, with the northern buildings almost completely covered in soil and grass, with few stones visible, while the southern structures are more akin to linear piles of stones with sparse soil cover. The condition of the surface remains allowed for mapping of building outlines, but not for the measurement of wall thickness.

The northernmost sector contains two structures: a long rectangular building measuring 58 by 8 m, and a smaller rectangular building that measures roughly 20 by 8 m. No door openings were visible in the long building, but it is most likely some sort of great hall, such as the type of Inca building often called a *kallanka*. Three possible doorways are evident in the remains of the smaller building, but no remains of an eastern wall were detected on the surface.

About 200 m from those structures, the easternmost sector of the site consists of a block containing two rows of four rooms, with a connecting passage running between. As a whole, the room block measures 26 by 20 m, the individual rooms varying from 8 to 9 m long, and just over 6 m wide. No doorways were readily visible; each room probably had a door opening into the central hallway. The room in the southwestern corner appeared to be subdivided into two compartments, creating the only break from the symmetry of the structures.

The southernmost side of Villamarca contains remains of two parallel sets of rectangular buildings and another long hall. The parallel groups both measure about 18 by 6 m, and each is partitioned into three sections comprising two rooms and a separating gap. The long hall is incomplete on the south end, but the dimensions of the remaining walls are 62 by 15 m. This sector contains other walls that probably formed enclosures rather than buildings. They include a 19 m segment separating the two parallel room blocks from the long hall, and a 6 m extension going northeast out

of the northwestern wall of one of the rectangular structures.

Along the western side of the site there are three terraces with rock-faced retaining walls stepping down the slope that descends to the northwest. These are constructed of rough field stones, and the middle wall rounds a corner and continues to the southeast. The remains of that wall border along where the land drops off sharply below the site, and there the remains become intermittent.

While all of the visible walls within the central section of the site are composed of field stones, there is evidence that at least several structures at Villamarca were built using fine Cuzco style cut-stone masonry. For example, many finely worked stones were taken from the site for the construction of the church in nearby Paquishapa, where they are still visible. At the time of the survey, there was a lone rectangular tan-colored cut stone remaining in the site, approximately 70 m to the south-southeast of the easternmost structures. There was no surface evidence of a wall to which it might belong, so it is unknown whether it was near its original position.

Villamarca undoubtedly formed a complex larger than the surviving architectural remains indicate. For one, the great amount of piled stone that form the borders of the modern farm plots hint at the destruction of many structures. The site appears to extend to the west and across the new path of the Pan-American Highway, where there are remains of some Inca-style walls, which could not be mapped due to the high density of current residences. A larger number of structures would agree with earlier descriptions of Villamarca (see Chapter 5).

To the west of the center of Villamarca is a line of Inca storage structures, or *qollqa*, placed at the eastern foot of the León Dormido rock formation. They were undoubtedly an integral part of the Inca complex of Villamarca, but these storehouses

were recorded as a separate site because of the discontinuity in surface evidence of architecture. For the sake of comparison to Inca storehouses to the south, they will be discussed in detail below.

Finally, about 500 m to the east of Villamarca lies a small waterfall, which descends directly in front of a small rock shelter. The water from the fall was probably channeled into the center of the site, similar to the way it is now diverted through the site for irrigation. While neither of these features appeared modified by the Incas, they probably related to the site in some way.

As noted by Uhle (1923), the basic layout of Villamarca is mirrored at Tambo Blanco, as detailed below. Remarkably, the same plan is also apparent at Tambo de Culebrillas up in the province of Cañar (see Fresco 1983:Figura 7). This repetition of site plan is noteworthy considering the variation of Inca installations throughout Tawantinsuyu. The similarities in these sites in southern Ecuador may be explained by the provinces being conquered around the same time, making it likely the centers were constructed contemporaneously and under the direction of the same set of Inca leaders. It may be that at the time of conquest of much of the southern highlands of Ecuador that sites of similar scale and intended function were based on a consistent plan, a practice that may not have applied elsewhere.

As a whole, the available data suggest Villamarca served in many capacities. The extent of the visible architectural remains suggest Villamarca to be a small to mid-sized site, based on which it would be easy to classify the site as a basic *tambo*. It certainly fulfilled the basic function of a *tambo* as generally conceived, i.e., service as a way station along the Inca road. It was certainly located where a *tambo* would be expected along the road, about a day's walk from Tambo Blanco, the next closest known Inca site. This fits the usual spacing between *tambos* and larger sites along the
Inca road system of 15 to 25 km (Hyslop 1984:300; 1990:278). One or both of Villamarca's long halls may have been devoted to accommodating travelers.

Beyond that role, Villamarca was almost certainly the administrative center for the Saraguro Basin, serving as the seat of Inca control. The site possesses many of the traits found at other Inca administrative centers in the empire, including location along the main road, placement on gently sloping terrain, and access to water (Hyslop 1990:278). The evidence of cut-stone architecture indicates the construction of significant buildings, of either royal or ceremonial importance. In addition to serving as the seat of political control, Villamarca was probably the economic focus of the region, controlling the nearby storage center at León Dormido and the labor that produced the goods that filled them. Because Fresco (1983:115) speculates that the site of Tambo de Culebrillas in Cañar was an administrative center for a region that specialized in herding, it is conceivable that the same held for Villamarca and Tambo Blanco, if Inca site planning is influenced by the local economic orientation.

Villamarca was also placed in a strategic location where it could control travel on the primary north-south road as it went in and out of the north entrance to the basin. It is unknown whether the path of the road pre-dates the Inca occupation, so it cannot be said whether the location held a similar strategic value in the Saraguro Period. The site may not have been a fortified military installation, but it could have housed troops, and the slopes leading up to it from the north and south could have afforded it some defense. Moreover, it had a commanding view of most of the basin, including almost every late Saraguro Period settlement. That view would have been of great strategic value by allowing the Incas to monitor people who lived in the basin, while at the same time, by being visible to those same people, serving as a reminder of imperial power.

Finally, Villamarca was likely the locus of important ceremonial activities. Most notably, some of the cut-stone masonry on the site may have come from a temple of the state religion. But apart from the built environment, the site has many associations that may have been critical in its establishment in that exact locale. As Hyslop (1990:288) states: "sacred geography,' the presence of sacred rock outcrops, water, and nearby mountain peaks and passes may have played a role in selecting the location of some settlements." The fact that Villamarca is located between the rock formation of León Dormido and a waterfall with a rock shelter, while also having a direct line of sight to the sacred peaks of Puglla and Acacana, strongly suggests the sacred landscape was a major consideration in the placement and functioning of the site. The fact that León Dormido resembles a sleeping puma is especially intriguing because there are indications that the Incas revered other hills in their realm that have feline profiles. For example, at the important pre-Inca site of Pukara near Puno in Peru, local perception of a puma shape in the prominent mountain beside the site may have been important to the symbolism of the site and influenced the Incas to build on that long-occupied site (Hyslop 1990:126). Much nearer, in Cañari territory 7 km from Azogues, the hill Cojitambo has been likened to a sleeping lion, and was an important sacred site of the Cañaris (Idrovo 2000). Cojitambo may also have been the location of a fort for the Cañaris (Heriberto Rojas C. 1988:97) and later for the Incas (Rowe 1991; Idrovo 2000).

The Stones of Paquishapa. Worth mention are a number of large cut stones of Inca manufacture that are scattered across the countryside to the south and southwest of Villamarca, near the modern town of Paquishapa. Fourteen were recorded during the survey; many more undoubtedly lie within buildings or in areas not surveyed. The blue-gray stones are probably andesite, which does not appear to be local to the area,

and is different from the light tan colored cut stones found in Villamarca and those conscripted for building the Paquishapa church. They are finely worked stones, of the type that the Incas used in walls classified by Agurto (1987) as sedimentary coursed masonry, which is made of exact rectangular blocks tightly fitted in uninterrupted horizontal rows. The Paquishapa stones are quite large, with measured examples having lengths between 71 to 88 cm, heights from 45 to 53 cm, and depths from 39 to 43 cm, all much larger than the worked stones seen within Villamarca itself. Most of them were rectangular, but two smaller, almost cubical, examples were seen, one of which had a circular hole in one side.

These stones may have been part of an important building within Villamarca, but it is notable that none of these stones are found within the site itself. Instead, they have been dispersed around the area by local people and put to various uses, such as grinding stones, porch furniture, and building blocks. It is also interesting that they do not appear to have been used in the Paquishapa church. Despite their dispersion, they do have a bearing on the interpretation of the function and importance of Villamarca. If in fact the stones were part of the architecture within the Inca center, their size and quality attest to one or more structures of great importance, such as a temple of the sun, or a building reserved for royal use.

However, there is reason to suspect that the stones were never part of a finished structure at Villamarca. Most suggestive is one of the earliest Spanish accounts to mention Saraguro by name, that of Murúa (1946 [1605]). He tells of building blocks being transported from Cuzco to Tomebamba (Cuenca), which were abandoned along the Inca road near Saraguro after one was struck by lightning (see Chapter 4). Guaman Poma (1936 [1615]) had a similar note in his list of *tambos* in the region (also discussed in Chapter 4). Furthermore, as discussed above, Villamarca

may be the site the chronicler Cieza de León (1984 [1553]:179) referred to as Las Piedras, which he described as having "many and very fine stones." This matches the description of Caldas (1912), who passed through the region in 1804 and noted a large number of stones cut into parallelepipeds. Also suggestive is the Quichua name of the nearby town, Paquishapa, which translates roughly to "many broken things."

While Murúa's story has an element of fantasy, the fact that the source for the stones appears to be outside of the survey area, their dispersal across the landscape, and the lack of evidence of original wall remnants at Villamarca do agree with the details of the tale. If they are indeed the stones of that story, then they were probably never used for structures in Villamarca.

Tambo Blanco

The second Inca center, Tambo Blanco (Sar-47), is located to the south of Saraguro within the Las Juntas drainage. It is situated to the southeast of Cerro Acacana, at an elevation of 2,520 m in a low-lying spot that appears to have been uninhabited before the Inca occupation. Now more commonly referred to as Ciudadela, this site is probably the best known prehistoric site in the province of Loja. It was first mentioned by Cieza de León (1984 [1553]; see Chapter 4), and later described by Villavicencio (1858), and Vernau and Rivet (1912), among other scholars (see Chapter 5). Uhle (1923) has provided the most information about Tambo Blanco, having excavated and mapped there. Because the site was only briefly visited during this project, the discussion draws much from Uhle's work.

Tambo Blanco (Figure 8-3) is in many ways remarkably similar to Villamarca. For example, it was built on gently sloping land, in this case along the Quebrada Tambo Blanco. As noted above, Uhle (1923) had remarked on the similarity in layout



Figure 8-3. Plan of Tambo Blanco, redrawn as a composite of the two maps produced by Uhle (1923:Plano 5, Plano 6).

of the two sites, stating that Villamarca "repeats exactly the general plan of Tambo Blanco, with the only difference the placement of the third large building to the west, instead of the east" (Uhle 1923:11, translation mine). When the plans of the two are compared, the similarity is indeed obvious, with three main sectors positioned in similar plan in relation to each other. Oddly, Uhle errs in claiming a disparity in the placement of Villamarca's third large structure, the one constructed of two rows of rooms and a central passage. Contrary to his note, it is actually located to the east, as is the corresponding structure at Tambo Blanco. In all likelihood, Uhle missed seeing those buildings at Villamarca, which could have easily been covered by vegetation at the time. He may have been thinking instead of the *qollqa* at León Dormido, if not some architectural remains that are no longer visible on the surface.

Like Villamarca, the structures of Tambo Blanco were constructed mostly of *pirca*. Including the empty ground between those buildings, the core of Tambo Blanco covers an area of approximately 2.7 ha; this layout appears more compact than that of Villamarca. The northernmost sector contains a long hall, measuring roughly 55 by 10 m (according to J. Belote and L. Belote 1996) with seven openings or doorways on the south side facing the center of the site. It is slightly larger than the corresponding structure at Villamarca, where there is a second building that has no analog at Tambo Blanco. On Uhle's plan, the walls of the Tambo Blanco long hall do not seem to be placed at right angles to each other, and it is more properly a parallelogram than a rectangle.

The structure on the easternmost side of the site is composed of two parallel rows of six rooms each, with a corridor running between. Adjacent to it is a small structure with two chambers. The larger building is very similar in plan to the corresponding structure at Villamarca, but contains four more rooms. The Tambo

Blanco structure measures about 65 m long, and around 19 m wide at the south end and 21 m on the north end. This is approximately the same width as at Villamarca, but more than twice the length. Most of the rooms have doorways opening into the corridor, yet as Uhle (1923:11) pointed out, none of the doors directly face the doorway of the room opposite. There is a doorway into the structure on the north end, and there also seems to be an entrance on the south side. All of the rooms measure about 10 to 11 m wide. Those on the western row are roughly 7.5 m long, while the eastern rooms range from 8 to 10 m, making them all slightly larger than their Villamarca counterparts. Uhle (1923:11) speculated that this building may have been an *aqllawasi*, or "house of the chosen women," which by analogy should apply to the structure at Villamarca.

Uhle designated the southwestern sector of Tambo Blanco the "palace." It is much larger and more complex than what is visible of the corresponding structure at Villamarca and within it Uhle found walls constructed of finely made cut stone. Many of those worked stones were removed for the building of the church in the nearby town of San Lucas, and none are currently visible on the surface of the site. The entire group of structures at its longest measures roughly 70 m, and at its widest, about 60 m. It is composed of two adjacent *kanchas* (groups of rooms and associated enclosing walls defining a plaza or patio space) attached to other assorted enclosures and less distinct structures. The main *kancha* measures about 43 by 29 m, and contains eight defined spaces around the central courtyard. It is most likely that the four largest defined rectangular spaces were separate roofed one-room units. The second *kancha* measures about 35 by 23 m, and contains four rooms laid out symmetrically, with two on both the north and south walls of the courtyard and a passageway separating the rooms in each pair. This patio group corresponds in plan

to the southern room block of Villamarca, which is slightly smaller. The components of the southernmost part of the Tambo Blanco "palace" sector are less organized, with the most notable feature being an 11 m corridor coming out of the central courtyard group. Finally, the "palace" includes a somewhat irregular enclosed space on its western side, measuring 60 m long by 19 m at its widest point. There are also a few terraces indicated at the southern end of this group, similar to the terraces found at the western side of the corresponding structures at Villamarca.

Finally, it is noteworthy that the symmetry of the two Inca centers extends to the placement of the associated storage units, with the *qollqa* in both areas (discussed below) being placed about the same distance and direction from the middle of the centers.

As with Paredones, Tambo Blanco is a small to medium sized Inca imperial installation that undoubtedly served multiple functions. Most obviously, it must have served as a *tambo*, as implied by the recording of the name Tambo Blanco by Cieza de León's (1984 [1553]:180) in 1547. However, the attachment of the Spanish word "Blanco" is suspicious because there was certainly a complete Quichua or native name for the site, suggesting that Cieza or another Spaniard may have created a convenient name for the site. Because the inhabitants of the region were said to be hostile to Spaniards at the time, it would be no surprise if Cieza simply invented a appellation rather than making an effort to quiz the natives regarding the local name.

At any rate, Tambo Blanco likely served as the Inca administrative center for some portion of the Las Juntas drainage, probably comparable in scope to the area administered by Villamarca in the Saraguro Basin. The elaborate plan of the "palace" sector and the cut-stone architecture found there by Uhle (see Chapter 5) reveal some sort of high-status compound, perhaps including a temple and/or the residence of an

Inca administrator. While calling it a "palace" may be a stretch, it is not totally unfounded. Tambo Blanco probably also served as the focus of economic activity in the area, controlling the nearby storage center on the hill of Buco (described below), although that *qollqa* installation was more physically separate than that next to Villamarca. Again, based on similarities in plan to Tambo de Culebrillas, there may have been some local specialization in herding, controlled from Tambo Blanco.

Because of its location on low-lying land, Tambo Blanco probably did not play the same strategic role as Villamarca. The view from Tambo Blanco may have been sufficient to keep tabs on people in the surrounding area, but it is not as encompassing as that from Villamarca. While Tambo Blanco was also stationed along the main north-south Inca road, it was not in a spot where travel could be easily controlled. Moreover, the location of Tambo Blanco is not easily defensible: it is bordered by two water courses that could be difficult to cross, but the approaches from the north and south are not particularly difficult, and there are no obvious fortifications within the site.

Lastly, Tambo Blanco was undoubtedly the focus of some ceremonial activity, with one or more of the buildings with cut-stone construction possibly serving as a temple. But in contrast to Villamarca, Tambo Blanco is not located directly adjacent to ritually significant features of the landscape, though its location near the confluence of two streams may have had importance. The nearby sacred peak of Acacana certainly had a dominating presence, and was probably the focus of much ritual activity. In addition, there should have been a direct line of sight to the nearby Inca ceremonial site of Ingapirca.

STORAGE FACILITIES

Within the greater Saraguro region, there are two sets of Inca storehouses, or *qollqa*, each associated with one of the two imperial centers. Some researchers have misidentified the long set of connected rooms on the eastern side of Tambo Blanco as additional storage units (e.g., Snead 1992:102, Fresco 1983:117). This is despite the fact that Uhle (1923:11), who had excavated there and knew of the *qollqa* on nearby Buco, speculated that the rooms of the Tambo Blanco structure were for lodging, perhaps of chosen women. Because the plan of the building in question is markedly different from the standard Inca layout of *qollqa* as separate rooms arranged linearly along terraces, and there are typical storerooms nearby, there is little reason to accept that the rooms at Tambo Blanco were also storage units.

León Dormido

Within the survey area, the remains of Inca storehouses were found at the eastern foot of the León Dormido rock formation, on the side where the hill begins to slope to the south. A single terrace contains wall remains representing at least 20 individual *qollqa* (Figure 8-4), beginning near the foot of an electrical pylon, and continuing west towards León Dormido, at an elevation of 2,650 m. The storage units are indicated by above-ground remains of wall rubble; in some cases four walls were visible, in others the structures were only partially represented. Parts of the terrace retaining wall below the *qollqa* were rock-faced which presumably was the case for its entire length. A small section of curved rock wall demarcates the western end of the terrace.

The structures are rectangular in shape, and the ones for which length and width could be assessed measured approximately 4.5 by 4 m. No entrances were



Figure 8-4. Plan of Inca storage units at León Dormido.

visible on the surface. Previous visitors to the site had excavated the western-most *qollqa*, presumably to floor level, and the interior was still easily visible during this project. The exposed storeroom has walls of *pirca*, and the walls are preserved 1.3 m or more below the present ground surface, giving an idea of the rate of soil formation at the site. The state of that unit suggests that significant portions of the other rooms are also preserved sub-surface.

In addition to the 20 *qollqa* that could be discerned, there were certainly more occupying the gaps between many of the presently visible units. Given the spacing and size of the storerooms measured, there could have been as many as 32 units along the terrace. Some may have been destroyed at the eastern end for the placement of the electrical tower, and the abundant piles of field stones above the existing *qollqa* suggests there may have been more structures on the crest of the hill.

There is not a continuous spread of artifactual material connecting the *qollqa* on León Dormido and the main areas of architectural remains of the Villamarca complex. However, there is evidence of Inca *pirca*-style walls in the space between the defined boundaries of the Inca center and the terrace containing the storage units, indicating that the *qollqa* are effectively part of Villamarca. Both facilities are placed on top of the large early Saraguro Period site that surrounds León Dormido, and like the Inca center, the storage complex has a commanding view of the Saraguro Basin.

The former contents of the *qollqa* could not be discerned from surface remains. A few Inca-style ceramics were found, but not in the quantities or types that suggest the storage of particular items or general categories of goods. A broken metate was found within one of the storehouses, but it could easily date to the earlier occupation.

Buco

The second *qollqa* group is located on the hill known as Buco or Milla, outside of the survey area in the Las Juntas drainage to the south of the Saraguro Basin. The site comprises ten separate storage rooms aligned almost north-south along a single terrace on the eastern side of the hill (J. Belote and L. Belote 1996), at an elevation of about 2,800 m. They are rectangular in shape, of *pirca* construction with red clay mortar (Leonard 1993), and measure between 4-5 m across with each room separated from the other by that same length (J. Belote and L. Belote 1996).

As with León Dormido, the *qollqa* of Buco are associated with an imperial Inca center, in this instance Tambo Blanco. In fact, they are close to the same distance and direction from the heart of Tambo Blanco as the León Dormido *qollqa* are from the center of Villamarca: in both cases the storehouses are roughly 800 m to the east of the middle of the associated Inca center. However, the Buco *qollqa* are located across a quebrada and around 280 m higher in elevation, while the León Dormido *qollqa* lie about 30 m lower than the center of Villamarca with no intervening topographic features (if one disregards the Pan-American Highway); at Buco these differences lend a feeling of greater physical separation from the nearby Inca center. The *qollqa* on Buco face out into the small valley toward Tambo Blanco, but probably have a less encompassing view than those at León Dormido.

Also like the León Dormido *qollqa*, those at Buco are situated on top of an Integration Period habitation site. However, this site dates to the late rather than the early sub-phase (J. Belote and L. Belote 1996). While at least one of the Buco storage units has been excavated by previous investigators, it is likely that the *qollqa* of Buco have suffered much less disturbance, and are better preserved, than those at León Dormido. It seems likely that the ten visible rooms represent the total number of

original units. The former contents of the *qollqa* on Buco are also uncertain. Testing by Leonard (1993) did not reveal any material goods, and did not include flotation or fine-scale analysis of the deposits.

CEREMONIAL SITES

Three Inca ceremonial sites were recorded during the project: two within the survey area, and one in the Las Juntas drainage to the south. The first two are essentially modified topographic features, while the latter contains Inca imperial architecture. The ceremonial sites vary widely in nature, although all appear closely connected to notable traits of the landscape.

Las Lagunas

In the community of Las Lagunas lies a carved bedrock outcrop that appears to be of Inca origin. It is situated on the western side of the community at an elevation of 2,580 m. The outcrop lies along a terrace where it is said the old Spanish road used to pass, which is about 40 m below the present route of the Pan-American Highway. The rock has a sugarloaf shape, and its western face has been carved such that there are four steps leading to the top, where there is a seat carved into the right-hand (southern) side, and a disk resembling a millstone carved in the center. The disk has a hole in the center, which was filled with leaves, water, and soil, but proved to be at least 40 cm deep when partially cleared.

The carved stone outcrop is an isolated feature; there were no structures or artifacts found in the vicinity. However, the features carved into it are characteristic of a an Inca *usnu* as defined by Hyslop (1990:69-70), suggesting a ceremonial function. While it lacks the defined plaza that is usually associated with an *usnu*, it

does overlook a broad flat area of land that could accommodate many people. The *usnu* now looks out over the marshy areas that are the remains of the eponymous *lagunas* of the community, and it has a clear view toward León Dormido and the Inca center of Villamarca. Those features of the landscape were the likely focus of rituals conducted there.

As a roadside feature situated outside of any imperial settlement, the Las Lagunas *usnu* may be a notable find in Inca archaeology. While at least one early Spanish account indicated that there were isolated *usnu* placed along Inca roads (Albornoz 1967 [late sixteenth century]), Hyslop (1990:95) noted that only a few known features may qualify as roadside *usnu*, and he did not believe any of those met his own definition. However, the elevated platform of Huayhuay Puquio in the province of Andamarca Lucanas in southern Peru (Schreiber 1993) is likely to be an *usnu* of this type (Katharina J. Schreiber, personal communication 2001). The Las Lagunas example appears to meet Hyslop's criteria for an *usnu*, and certainly bears further investigation.

El Baño del Inca/Las Cuevas

Little more than one km to the southeast of Saraguro, on the western cliff face of Loma Huelemón are found a set of rock shelters (Sar-3) and a waterfall. The three contiguous rock shelters, known as Las Cuevas, are the largest and most prominent within the survey area, and show evidence of use during most, if not all of the phases of Saraguro prehistory. Adjacent to them on the south the waterfall descends from the top of the mesa Loma Huelemón to the Río Sinincapa. This is perhaps the tallest waterfall in the region, cascading down about 150 m through a series of natural bedrock basins. Because water was considered sacred by the Incas (Hyslop 1990:129-

130) and caves were often also *huacas* (Rowe 1946:296) they could not have escaped the eyes of the Incas.

While no diagnostic Inca artifacts were found at the site during the survey, there are other indications of an Inca presence. First, there is a series of steps carved into the bedrock leading up to the caves and also in the cliff face on the opposite side of the waterfall, leading to the top of Loma Huelemón. Second, according to local folklore, one of the uppermost basins is known as El Baño del Inca, the "Bath of the Inca," where it is said the Inca would bathe while sitting on a specially carved seat. While difficulty of access hindered the close inspection of the topmost basin, it is evident that a V-shaped groove was carved into the top of the front wall of the basin to channel the outflow of the water and to make it pour neatly into the next one. This type of modification for directing the flow of water is typical of Inca carved fountains elsewhere in the empire, and suggests that El Baño del Inca is not ill-named.

Ingapirca

In the Las Juntas drainage to the south of the survey area are the ruins of the ceremonial site Ingapirca. This small site is located on the northern side of the mountain Cerro Suniurco (also called Cerro Tambo Blanco or Cerro Ingapirca), nestled within a saddle that connects it with Loma Torre (which is also called Loma del Loro or Loma del Oro). It straddles the continental divide, and, at 3,160 m, is the highest site of any kind recorded during the project. Ingapirca would have been easily accessible from Tambo Blanco, which lies approximately four km to the southwest. It is well-known to local people, although its placement makes access difficult and the thick cloud forest vegetation that covers the site impedes investigation of surface remains.

Ingapirca consists of two structures of fancy Inca masonry of tan stones laid in a coursed sedimentary style (Figure 8-5). The structure to the northeast is a stepped square platform, with up to four levels, measuring between 7 to 8.5 m on each side at the base, and around 5.5 m per side on the top level. Fresco (1983) shows the second building to be a long rectangle, roughly 6.5 m wide and up to 32 m long, with some partitions at the southeast end. It may have been some sort of long hall or an unroofed enclosure.

In contrast to Fresco's plan, the Belotes (J. Belote and L. Belote 1996) show the site to consist of two identical square platforms, measuring 12 m a side at the base, and 7 m a side on top. The two are separated by 12 m, with each one placed along the continental divide. The Belotes examined the extent of architecture by probing the ground, and presumably Fresco had the land cleared, and thus had better visibility. While the two plans disagree in some respects, there clearly is a square stepped platform making up the northern part of the site, confirmed by observation during this project. Together, the use of finely cut stone in the two structures and the unusual location indicate that Ingapirca was an important and specialized ceremonial site. Additionally, the stepped platform is a design characteristic of an *usnu*, and is comparable to Inca ritual platforms found in a number of provincial Inca sites. The plan of Ingapirca as a whole is similar in plan to the *usnu* and rectangular enclosure in the southwest corner of the site of Vilcashuamán, as shown in von Hagen (1961), though Ingapirca is lacking a defined plaza area.

The religious significance of the site may be in part tied to its unusual location along the continental divide, where water flowing down the east side of the divide eventually drains to the Pacific, via the Río Paquishapa and the Río Jubones, while water flowing down the west side drains to the Atlantic via the Río San Lucas and Río



Figure 8-5. Plan of Ingapirca (after Fresco 1983).

Zamora, which leads to the Amazon Basin. This is a reversal of what is usually expected along the divide, and may have been noticed by the Incas, to whom water, especially flowing, was ritually important. A ceremonial focus on a reverse continental divide may be unique in the Inca realm. Additionally, the sacred mountain Acacana may have been a ceremonial focus of Ingapirca, as the peak could be seen directly from the site given the removal of the vegetation cover.

Other Ceremonial Loci

Because ethnohistory indicates the mountains Acacana and Puglla had religious significance to native people in the early Spanish colonial period, it is highly likely the Incas incorporated them into their ceremonial practices as well. This was likely to include performing rituals on the mountain summits, as well as including them in the content of ceremonies at the Inca centers and ceremonial sites. Although no evidence of such activities was found on Puglla during the survey (the attempt to scale Acacana was thwarted), a number of people informed me that some graves were encountered and looted on the summit of Puglla during construction related to an antenna installation. The most detailed description regarding the grave goods depicted them as including several small ceramic vessels with geometric decorations. This strongly suggests Inca ceramics, as very little of the local wares had any sort of decoration at all. Inca sacrifices on top of sacred mountains were common throughout Tawantinsuyu, and it would be surprising if they did not occur in the Saraguro area. I heard no similar reports about Acacana, but there are no antennae on its summit and it is less accessible, so comparable discoveries are less likely to have occurred. Nevertheless, there are many other tales told of Acacana, many of them having to do with gold, which could have roots in actual Inca rituals practiced there.

INCA ROADS

Around Saraguro, the forces of vegetative growth, erosion, heavy agricultural use, and modern transportation improvements combine to obscure evidence of the infrastructure of Inca control, such as roads, bridges, and canals. In total, the survey encountered only two stretches of paths whose attributes make them reasonable candidates for original stretches of Inca road (Inga Ñan or Capac Ñan in Quichua). The first and most likely is a length of path with a cobbled surface lying near the western side of the base of Cerro Acacana. This trail is about 1.5 to 2 m wide, and runs for a few dozen meters north and south. The base of cobbles and the condition of the path make it resemble a stream bed, except for the fact that it follows the contour of the hillside rather than running down slope. The second candidate is a trail located about 1.5 km south of the community of Oñacapac, on the western bank of the Río Oñacapac. A stretch of roughly 750 m shows some features common to Inca roads. Its width is rather regular, about 1.5 meters wide, and in places the lower side of the road is supported by a field stone retaining wall. However, this path continues to be heavily used, and does not exhibit the level of erosion expected from a trail of significant duration. It is regularly maintained by the community, and may have been constructed this century. In contrast, the possible stretch of Inca road near Acacana is more isolated, is seldom used, and is of different construction than other trails in the region.

Otherwise, the survey did not locate any evidence of Inca bridges over major waterways, as might be indicated by the remains of abutments for suspension bridges. Due to the inaccessibility of the some of the steep riverbanks, not all possible crossing points were examined, especially in the lower reaches of the Río Paquishapa, north and west of where the Pan-American Highway currently crosses. Notably, a number

of foot bridges in current use in the region are made in the style of Inca wooden bridges. These are used to cross smaller water courses at points where the banks are not too steep. Stone piers are built on each bank, supporting tree trunks that span the stream. The trunks are covered by branches and other plant materials, which support a layer of soil on top. Earthen ramps usually lead up to each side of the bridge, and the structures are strong enough to support cattle. It would be difficult to date these bridges, as the construction techniques are basic, and the organic sections of the bridges are periodically replaced by people of the communities who utilize them. Even if none of them can be directly attributed to the Inca Period, they clearly indicate a continuation of basic Inca design. Many of these bridges are being modernized, some with concrete reinforcing of the buttresses, and at least one has been converted to a concrete span.

ARTIFACTS

It is fortunate that the imperial Inca sites of the Saraguro region were easily identifiable based on architectural remains and features carved into bedrock, because overall the number of artifacts seen on the surface at those sites was very low. There were no artifacts of any kind seen at the *usnu* of Las Lagunas, or at Ingapirca, and no diagnostic Inca artifacts were found at Las Cuevas/El Baño del Inca. Numerous ceramics were seen around Tambo Blanco, no collections were made there (see Footnote 1). Some of the fields adjacent to that site contained ceramics, which mostly appeared to be plainwares, although none were obviously of the Saraguro Period types. The greatest number of artifacts were found at the Villamarca/León Dormido complex, but the high density of current occupation on the land and the fact that the Inca storage and administrative sites overlay an early Saraguro Period settlement

make it difficult to distinguish Inca artifacts from earlier or later occupations.

Inca-style Ceramics

The limited number of typical Inca-style ceramics found at Villamarca include two rope nubbins or animal head lugs, one strap handle fragment and one rim fragment. Both rope nubbins are buff colored, unslipped, and unpainted, and undoubtedly came from large aríbalos (Inca-style storage jars). The first (Figure 8-6a) is roughly trapezoidal in shape, 3.9 cm at its widest and 4.3 cm in height. It clearly represents an animal head, with eyes formed by two elongated, nearly vertical, indentations on the front side, and a small, irregular indentation on the underside serving as a mouth. The second rope nubbin (Figure 8-6b) is rough oval shape, 3.6 cm wide by 3.2 cm high, with no embellishments. The handle fragment is 1/3 of an angled strap handle form, buff colored, unslipped, and unpainted, which measures about 3.2 cm wide; this angled type of handle is commonly found on pedestal jars, and some other Inca vessel forms. The rim sherd (Figure 8-6c) is notable because it has a protuberance similar in form to those often seen on some Inca plate and bowl forms. The protuberance is trapezoidal in shape, measuring roughly 4 cm where it attaches to the rim, and it extends 1.8 cm from the rim itself. The exterior of the sherd is painted or slipped black, and its interior is unslipped and buff colored; the fragment is otherwise undecorated. From the orientation of the rim, it appears to come from an open bowl or similar type of vessel.

Three strap handle fragments were found around the *qollqa* at León Dormido. The first is approximately 1/3 of an angled strap handle, buff colored, unslipped, and unpainted, which measures about 4 cm at its base, narrowing down to just over 3 cm. The second handle is a buff-colored mid-strap segment that is also unslipped and



Figure 8-6. Inca-style ceramics from Villamarca: a) animal head lug or rope nubbin; b) rope nubbin; c) rim sherd with protuberance.

undecorated, and measures 5 cm in width. The third example is about 1/3 of a handle, and includes fragment of the vessel body, both of which are covered in what appears to be a fugitive red slip. The strap measures 5.5 cm wide where it attaches to the body, and 5 cm wide in the middle of the handle. The second and third strap handle fragments probably came from medium to large sized *aríbalos*.

Other Ceramics

A number of other potsherds were found at Villamarca, which are distinct from both Inca styles and local Saraguro Period wares. It is difficult to date these ceramics because they were found on the surface of a site that has been occupied off and on from the early Saraguro Period; they could date from the post-Inca era, anywhere from the Spanish colonial period to the twentieth century, or they could represent a mix of sherds from Inca and post-Inca contexts. However, it is almost certain that they do not belong to the Saraguro Period. Of particular note are a set of eight rims with lips decorated with punctations, all of which come from medium to large sized jars:

Figures 8-7a, 8-7b, 8-7c. These three ceramics have punctations along the top edge of a rounded lip. The rims are flared, although one is nearly straight. Two of the sherds have a black slip on the exterior and are unslipped on the interior, while the third is unslipped with a red stripe painted along the upper exterior of the rim. A rim diameter of 16 cm is indicated for the two black slipped sherds, while a rim diameter of 22 cm is indicated for the unslipped sherd. The punctations on these rims are oval in shape, although in one case, they are less defined, such that they produce something of a scalloping effect.



Figure 8-7. Rims with punctations from Villamarca.

Figure 8-8a. This flared rim has a single punctation along the edge of its rounded lip, similar to the three rims above, although its rim profile is more strongly flared with a sharper angle at its point of inflection. It appears unslipped and otherwise undecorated, with an indicated diameter of 18 cm.

Figure 8-8b. This flared rim has four punctations along a rounded lip, and a diameter of 22 cm. It has a thick, rounded vertical handle, which measures about 4 cm long and 2 cm wide. The exterior has a thin black slip, while the interior is unslipped.

Figures 8-9a, 8-9b, 8-9c. These three thick flared rims have numerous closely spaced punctations along the edge of flattened lips. Rim diameters range from 17 to 22 cm. All three sherds have a red slip on both interior and exterior surfaces, but have no painted decoration.

Other Artifacts

Two ground stone items found near the *qollqa* of León Dormido and one found within Villamarca may date to the Inca Period. One of the items in the storage site was half of a broken metate, made of a roughly rectangular stone that did not appear to have been shaped and measuring 29 cm wide, 14 cm tall, and 23 cm along its broken axis. The metate had a large deep basin on the top side, and a smaller basin on its underside, which made it appear to be a double-sided grinding stone, and a small hole had broken through, suggesting the metate had reached the end of its uselife. Both basins were deep enough that they could have been used for either metateor mortar-style grinding actions. This metate had been found within the wall remains of one of the Inca storerooms, but was not collected, and was found to be missing from the site upon a subsequent visit. Another metate fragment was found downslope



Figure 8-8. Rims with punctations from Villamarca.



Figure 8-9. Rims with punctations from Villamarca.

from the line of *qollqa*. The fragment was wedge-shaped, measuring 15 cm along its unbroken edge, at least 14 cm wide, and 9 cm deep. The ground area covered almost all of the top surface practically to the edge, and formed a shallow basin that lacked the deeper bowl shape seen in most of the Saraguro Period ground stone. This fragment has every indication of being the type used with a rocker mill style hand stone, which type was spread through much of the Andes by the Incas. A similar broken metate was found at Villamarca. This one appears to be half of an oval shaped stone, which measured 44 cm in length, 20 cm along its broken axis, and 8 cm deep. The ground area measured 35 cm in length, 14 cm in width, and 3 cm in depth. It may have been a rocker mill type stone as well, though it is a little more ambiguous than the first example.

The only other non-ceramic artifact that is likely to date to the Inca Period recorded within the imperial Inca sites is a broken carved stone bowl (Figure 8-10). This finely worked bowl is round, and is about 60% complete. It measures 19 cm in diameter at the rim, and 11 cm tall, with walls about 4 cm thick. The lip is rounded, and the basin is rounded and well-worked, and could have functioned as a mortar.



Figure 8-10. Stone bowl or mortar from Villamarca.

The bowl is decorated with two incised lines along its circumference, one at 4 cm below the rim, and the second 9.5 cm below. The second incised line marks a flat circular base for the bowl, which is roughly 1.5 cm thick and 11 cm in diameter. Somewhat similar artifacts have been found at the Inca site of Tomebamba (Idrovo 2000:285), and are described as mortars, but those examples are not nearly as well-made as the one from Villamarca.

NON-INCA SITES

The survey revealed no sites that were both newly established during the Inca Period and non-Inca in cultural affiliation. Instead, local settlements seemed to be limited to previously existing habitations, as indicated by the presence of Inca ceramics in sites containing diagnostic late Saraguro Period materials. Within the project area, only two such sites were identified: León Pugllana (Sar-35) in Hierba Buena and Gurudel, and Huiñashapa (Sar-31), in Oñacapac (see Figure 8-1). Unfortunately, because Inca-style ceramics are quite distinct from Integration Period wares, they are frequently collected by locals, greatly reducing the likelihood of their being found during pedestrian survey. During the project, we were shown several rope nubbins from Inca-style *aríbalos* of unknown provenience, including at least one that was said to come from the community of Ilincho, which contains a couple of large Saraguro Period habitation sites (Sar-42 and Sar-43). It is therefore likely that a number of other late Saraguro Period sites within the basin were also occupied during the Inca Period.

Because the number of known non-Inca sites with an Inca Period component is very low, little can be said in relation to settlement patterns. It is notable that both sites with confirmed Inca Period dates are rather large hilltop habitation sites: León

Pugllana is the largest of all sites in the basin, and Huiñashapa is the seventh largest of the 19 habitation sites of the late Saraguro Period. While both are located in the eastern side of the basin, Ilincho, where other Inca ceramics were said to be found, is on the western side. The settlements at Ilincho are also large hilltop habitations. These sites contained the same range of types and styles of artifacts as found at other Saraguro Period sites, and they revealed no architectural features that would set them apart.

Artifacts

Within non-imperial sites, the number of artifacts that could be dated to the Inca Period was very low, mainly because these are multi-component sites containing remains of predominately unembellished, utilitarian goods. The number of Inca-style ceramics on these sites is quite low, and no non-Inca ceramics diagnostic of the period could be distinguished from those of the late Saraguro Period. The only other artifacts noted that may reasonably be assigned an Inca Period date are rocker mill hand stones, one example of which was found at Cabishapa (Sar-14). The rocker mill type of grinding stone was likely introduced to the region by the Incas, but because it remains in use by people living around the Saraguro countryside, its presence is not necessarily diagnostic.

Figure 8-11. This body sherd with a complete strap handle was found at Huiñashapa (Sar-31), eroding out of the hillside above an irrigation canal. This piece is buff colored, unslipped, and undecorated. The strap handle measures 10 cm long, 3.5 cm wide, and 1.2 cm thick. It appears to be a handle from a medium sized Inca *aríbalo* (storage jar).



Figure 8-11. Strap handle from Huiñashapa (Sar-31).



Figure 8-12. Inca-style aríbalo and aríbalo neck from León Pugllana (Sar-35).

Figure 8-12. These two Inca-style ceramics were seen at León Pugllana² (Sar-35). The first item was a small sized *aríbalo*, which was nearly complete except for missing the upper 2/3 of its neck. The *aríbalo* appeared to be covered with a light orange-buff slip, and was undecorated except for an animal head lug, which had a face formed by connected eyes and mouth represented by a "U" or "V" shaped groove. The vessel has two thick strap handles, with a small hole about 2 cm in diameter above and to the left of the right handle. The hole is unusual in that it appears to have been made pre-firing rather than as the result of a break during usage. The second item appears to be the middle 4/5 of the neck of an Inca-style *aríbalo*. Although the painting and finish were faded and not of high quality, this was the most elaborately decorated ceramic piece seen during the survey. The neck was covered in a red slip and was circled by two bands of black, contiguous diamond shapes on a white background. The two bands were bordered by thin black lines, and were separated in the middle of the neck by an blank space of the same width as the bands themselves.

All of these Inca-style ceramics were likely produced locally, as they did not show the high quality of manufacturing or decoration that would characterize imported Cuzco-Inca wares or some of the provincial Inca ceramics known from other regions.

² The Inca ceramics from León Pugllana were also collected by a local family, but confidence in the provenience is high because we were shown the location where they were found by the person who encountered them. While using information from such contexts leads to the gray area of archaeological ethics, this family came upon the artifacts on their own land in the course of farming activities, and were not actively looting or trying to sell artifacts.

DISCUSSION: THE INCA OCCUPATION

Overall, the survey was successful in identifying Inca imperial installations, which provided the types of data that enable the analysis of many aspects of the Inca strategies of controlling and exploiting the region. But the difficulty in identifying non-Inca sites for the period limited the ability to examine the role resettlement played in the Inca occupation of the region.

Acquisition of the Region

Not surprisingly, given the difficulties of detecting warfare in the archaeological record, the results of the field work shed little light on how the Incas acquired the province. There was no direct evidence of violent confrontation between the locals and the invading Inca forces, which in light of the environmental conditions of the Saraguro region, would be difficult to detect only through surface remains. It is conceivable that the site of Quebrada Honda (described in Chapter 7) was some sort of temporary Inca military installation, in which case excavation could unearth important clues about the Inca conquest. Other available lines of evidence do suggest a conquest by force did indeed occur. As discussed in the previous chapter, the local people appeared to be concerned with and prepared for warfare, and thus had the potential to contest the Inca incursion. More telling is the evidence from ethnohistory, with one of the more reliable sources, Cabello Balboa (1945 [1586]:305) stating outright that the natives of the southernmost Ecuadorean highlands had fortified themselves in Saraguro to fight the Inca onslaught. Also, the fact that the Incas established their administrative sites independent from local settlements (indicating direct imperial control, see next section) is another indicator

that the local people were not peacefully incorporated into the empire. Indirect or supervised rule would have suggested more cooperation on the part of the natives.

Political Administration

There are many indicators, including the size of the Inca center, its multiple functions, and the presence of cut-stone architecture, which strongly imply that the Incas had imposed direct rather than indirect rule within the Saraguro Basin. Furthermore, the Inca strategy of political control was certainly not one of supervised rule, because Villamarca was not located adjacent to or within a late Saraguro Period political center. Many of the same conditions apply to Tambo Blanco, so it is likely that the Incas instituted direct rule within the Las Juntas drainage as well.

It is known that the Incas had implemented their decimal administration system in southern Ecuador (see the account of Salinas Loyola from the 1570s in Chapter 4), and this undoubtedly included Saraguro. It also appears that the Saraguro region was part of the Hanansaya (upper) province of the Cañaris (Archivo General de Indias, Seville 1540, in Caillavet 1989), which was probably a unit of 10,000 tributaries. The inclusion of Saraguro in a Cañari province lends support to the idea that the pre-Inca inhabitants were not "Paltas," although there is the possibility that the region was appended to the Cañari Hanansaya simply for accounting purposes, i.e., to round out the numbers. It is unknown whether Tambo Blanco and its territory were also part of the same Inca province.

It is difficult to gauge how many people lived under the jurisdiction of Villamarca, and thus what type of unit it represented in the decimal administrative structure. One known document (Peña 1572) notes 500 residents for a region including Saraguro, although it is unclear to how large a territory it refers. The

number of 500 could reflect Inca accounting and the ideal quantity of households that should constitute the precinct, but it could easily be a figure that emphasizes the extreme results of depopulation after nearly four decades of Spanish rule. Nonetheless, it is apparent that the Saraguro Basin was a subset of a larger administrative unit of 10,000 tributaries, and that the division was probably on the order of 500 or 1,000 tributaries. This number of tributaries and the low number of non-Inca sites noted during the survey indicate there were few levels in the political hierarchy in the region, which probably corresponded to two levels in the settlement hierarchy with Villamarca taking the highest position. Based on the similarities in site layout, Tambo Blanco was probably comparable to Villamarca in presiding over a similar hierarchy and number of tributaries.

The Inca administrative system, with a single site controlling the whole basin, represents a consolidation of the situation from the Saraguro Period, when the basin was probably organized into two separate chiefdoms with two to three levels in the settlement hierarchy. Rather than instituting indirect rule and elevating one of the two largest local sites, Loma Huelemón or León Pugllana, to prominence, the Incas chose to impose direct rule and establish a new site as an administrative center.

Economics

The economic system of the basin under the Incas is not very apparent. The surface remains and settlement patterns do not suggest any sort of economic specialization in the region, unless the corrals noted along the eastern and northern edges of the survey zone date to the Inca Period. There are two other hints that herding of camelids was important in the area. First, herding was a specialization in the region of the Inca site of Culebrillas, and if the layout of that site reflects the local
economic focus, then its similarity in plan to both Villamarca and Tambo Blanco may indicate a similar specialization. Second, there are suggestions that at least some of the *mitmaqkuna* of Saraguro were Collas (Moya 1981:55), who were noted to have worked often as camelid herders when they were resettled by the Incas (Murra 1980 [1955]:156).

Otherwise, the small number of *qollqa* in the region indicate that the labor the subject people devoted to the state did not result in great amounts of products that required centralized storage. This implies that agricultural intensification was not an Inca priority in Saraguro (and there were no improvements to the land to suggest otherwise), or it may simply reflect a rather low population. Over all, the Incas may not have had a major interest in exploiting the economic potential of the Saraguro region.

Infrastructure

It appears the Incas did not invest heavily in infrastructure in the region during their reign; there were no large scale terracing or major irrigation works, nor other substantial changes to the landscape. The most important improvement the Incas made was the routing of their main north-south road through the area. This stretch of road connected Tomebamba, the most important site in the north, to Cuzco and the rest of the empire to the south. On its way through southern Ecuador, the road passed directly by the two local Inca centers of Villamarca and Tambo Blanco with their associated storage complexes, and went by at least two ritually important sites in the Saraguro Basin. Though not revealed by this survey, the Incas undoubtedly built additional installations in the region, such as bridges and *chaski* (messenger) stations, that were invariably associated with their road network.

It seems almost certain that the main Inca road ran along a course that approximates much of the current route of the Pan-American Highway (Figure 8-13). Beginning at the north entrance to the Saraguro Basin, the *Capac Ñan* without a doubt passed through Villamarca. From there it would have gone down to cross the Río Paquishapa, and then pass close by the Inca ceremonial spots at El Baño del Inca and the carved rock outcrop at Las Lagunas. It probably proceeded by the base of Puglla and its *laguna*, but somewhere south of there the route of the Inca road and the Pan-American diverge. The Inca road must have passed through Tambo Blanco, as was noted by Cieza de León (1984 [1553]:180), but that site lies about an hour's walk from the modern highway, even when starting from the old route of the Pan-American, which went up Loma del Loro. The suspected surviving segment of Inca roadway found at the western base of Acacana is likely to have been where the Inca route turned to the southeast to lead to Tambo Blanco, and it was probably preserved because of the divergence with the Pan-American.

A key question is what other Inca roads went through the area. It is conceivable that connector roads from the coast or the eastern lowlands joined the main Inca road somewhere near Saraguro, perhaps at Tambo Blanco or Villamarca. This would certainly make the region more strategically significant, but no surface evidence for such routes was seen in the survey. It seems more likely that there were two or even three parallel north-south routes in the greater region, as noted by earlier scholars (Caldas 1912; Uhle 1923) and mentioned in ethnohistorical accounts (Zárate (1968 [1555]) and López de Gómara (1993 [1552]). Only one possible fragment of such a parallel path was found during the survey, the stretch of well-built and maintained path near Oñacapac. Otherwise, their courses may lie outside the survey area.



Figure 8-13. Likely route of the main Inca road through the Saraguro region.

It is possible some useful knowledge of other Inca roads persists in local oral history. Unfortunately, current awareness of the royal roads is rather slim, though a few people offered some hints. I was informed variously, and with differing levels of conviction, that the *Capac Ñan* went through the communities of Gurudel, Oñacapac, and Ilincho. Ilincho is close to where the central north-south road went through, so it is unlikely that a parallel road passed through at that point. But Gurudel and Oñacapac are located on the eastern side of the basin, and both contained local sites with Inca-style ceramics. Thus, it is conceivable that the Incas had some type of road passing through those areas, perhaps connecting with Villamarca to the north and Ingapirca to the south. It is also notable that the other suspected (though less convincing) stretch of Inca road encountered during the survey was in Oñacapac.

Ceremonial Organization

It is clear that the Incas invested much in ceremonial activities in the region. The administrative centers were probably the locus of many rituals, as was the case throughout the empire, where a major component of Inca administration was frequent rituals of consumption with the participation of both Incas and their subjects (Morris 1982). Beyond those basic state rituals, both Villamarca and Tambo Blanco may have had temples made of cut-stone architecture, which would have been the focus of important activities related to the state religion.

On the whole, the Inca approach in the region focused heavily on appropriating distinctive features of the landscape, making them the object of specialpurpose ceremonial installations. Las Cuevas/El Baño del Inca obviously centered on the caves and waterfall on the western side of Loma Huelemón, rituals at the *usnu* of Las Lagunas were probably directed toward the local bodies of water and the León Dormido formation, and Ingapirca may have been devoted to the special nature of the reverse continental divide as well as the sacred peak of Acacana. Rituals at the Inca centers probably also focused on the sacred peaks, and Villamarca may have had a special emphasis on León Dormido. In fact, the Incas likely placed their center next to that formation in a deliberate effort to appropriate its sacredness. Waterfalls, bodies of water, caves, mountains, and rock outcrops were all important in Inca religion, so it is no surprise that they were accorded special attention in the Saraguro region. But it is notable that the Inca investments in ceremonialism outweigh those in many other endeavors in the area.

A range of types of rituals is suggested by the Inca ceremonial sites. The caves and waterfall at Las Cuevas/El Baño del Inca could have accommodated only a limited number of people at any given time, and rituals there were probably performed on a personal level as travelers passed by on the Inca road. The *usnu* of Las Lagunas is set up such that larger number of people could witness ceremonies conducted by special functionaries, either priests or Inca nobility. Though it had the most elaborate structures, Ingapirca was more isolated and less accessible, and was probably the scene of important rituals with limited numbers of participants. It is highly probable that the summits of the mountains Puglla and Acacana were witness to special Inca ceremonies, including human sacrifice; participation in these activities would also have been restricted. The most public and frequent rituals were likely held at the Inca centers themselves.

Over all, the Incas were thorough in establishing their state religion in the region, and in co-opting the sacred peaks and other notable features of the landscape. It is difficult to tell if any aspects of the local religion were allowed to co-exist with that of the empire. But if the entire native population was removed, then their

ceremonial practices undoubtedly left with them, although some of their beliefs regarding the natural landscape may have been picked up by the Incas. Notably, there were no major local ceremonial centers to incorporate into the imperial system.

Military and Strategic Concerns

The Saraguro region must have had some strategic importance, being positioned along the main north-south Inca road, possibly near a pre-existing political and ethnic boundary (separating the Cañaris from the "Palta" people), and close to external imperial borders to the east and west. Nevertheless, the Incas did not construct any forts or other defense works in the region, indicating that they perceived no major threats, either internal or external. The possible exception is the site in Quebrada Honda, which could be some sort of Inca military installation, although at this point I can only speculate about its function and cultural affiliation.

The Incas constructed forts elsewhere in the province of Loja, as noted by Salinas Loyola (1571 or 1572, in RGI 1897). Those were described as hilltop, layercake terraced sites, similar to those found in abundance to the north of Quito (Plaza Schuller 1976). While no sites of that description were found within the survey area, many of the pre-Inca hilltop habitations sites were very defensible. A few of those settlements remained occupied during the Inca Period, and had the potential to serve the Incas as forts if the need arose.

The Inca center of Villamarca was somewhat defensible, bordered by slopes to its north and south, the latter side having a wall built along the top edge. It was also located at a constricted entrance to the north end of the basin, and had an excellent view of the surrounding settlements, so it had strategic advantages that could facilitate controlling both the local population and travel along the Inca highway. In contrast,

Tambo Blanco was not situated in such an advantageous position, implying control of the road was less crucial at that post. There was no evidence of any type of control point on the south end of the Saraguro Basin, which suggests the Incas may have been insecure regarding the people to the north, and unworried about those to the south. The differences may derive from the timing of Inca conquests in southern Ecuador, i.e., if the Saraguro and Las Juntas drainages were conquered about the same time and there was a delay before land to the north was subdued, the Incas would have found it advantageous for Villamarca to be more strategically situated than Tambo Blanco.

DISCUSSION: RESETTLEMENT IN SARAGURO

Although the survey encountered no definitive direct archaeological evidence for *mitmaqkuna* in the Saraguro Basin, there are several reasons to infer that the Incas did indeed bring colonists into the region. The fact that the Incas subjected practically every province under their control to some level of resettlement means that it would be highly unusual for the area *not* to have hosted at least some *mitmaqkuna*. The available ethnohistorical information relating to the southern highlands of Ecuador is certainly suggestive (see Chapter 4), and the oral history of the Saraguros cannot be discounted.

But if confirmation is sought via archaeological evidence, the settlement patterns give good reason to presume that the Incas settled *mitmaqkuna* in the local habitation sites. The most convincing argument is based on the fact that no new settlements were established during the Inca Period, while a few of the late Saraguro Period hilltop habitations continued to be occupied into the imperial phase. It was noted by Spanish chroniclers (Cobo 1979 [1653]:194) and confirmed archaeologically in at least two provinces (Hyslop1990:151-152) that the Incas tended to move

conquered people from their defensible hilltop sites to lower, open, and more easily controlled settlements, especially when those groups had resisted the imperial incursion. For the Saraguro region, the ethnohistoric documents indicate the people did resist the Incas, and the archaeological evidence shows they had the capability to defend themselves. In all likelihood, if the Incas had let any of the local people remain in the Saraguro Basin, they would not have been allowed to remain in their hilltop habitations. Because there was no evidence for a shift to even one lower habitation, it is most likely that at least some of the local population was removed from the region, and that more trustworthy *mitmaqkuna* were placed within some of the Saraguro region (see Chapter 4) were in rebellion for the first decade or two after the fall of Atahuallpa, attacking Spaniards who dared to pass through and fighting with their Cañari neighbors; this demonstrates that the inhabitants were indeed loyal to the Inca cause.

Within the pre-Inca Saraguro cultural area, this settlement pattern of re-use of local hilltop habitations is supported by evidence collected by other researchers outside the present survey area. For instance, Collier and Murra (1943:32) found Inca pottery "sparingly mixed" with early and late Saraguro Period ceramics on a ridgetop habitation site called Chilpas, where they also noted that a "multicameral structure with stone walls of Incaic construction is located on top of the ridge." The Belotes (J. Belote and L. Belote 1996) have encountered one Inca rope nubbin each at the sites they designated Gañil and Quebrada Cajamarca 3, both of which included late Saraguro Period ceramics. Gañil is located to the west of Saraguro, while Quebrada Cajamarca 3 and Chilpas are located to the northeast, farther up the Río Jubones drainage. It is significant that this pattern of low counts of Inca-style ceramics within

pre-existing local settlements matches that of suspected *mitmaqkuna* settlements elsewhere in Tawantinsuyu, namely in Huánuco (Morris and Thompson 1985) and the Carhuarazo Valley (Schreiber 1987, 1993).

In addition to the hilltop habitations, *mitmaqkuna* could have been stationed at the major Inca sites in the region. It is unlikely that all of the personnel at those installations were Incas by blood, and if it was the case that few if any of the local people were allowed to remain in the region, then *mitmaqkuna* would have been required to staff sites like Villamarca and Tambo Blanco. The unusual ceramics with punctate designs found at Villamarca may have been associated with mitmaqkuna at that site.

The related question of the ethnic affiliation of the *mitmaqkuna* brought into Saraguro was not answered by the archaeological data, and again oral tradition and ethnohistory provide the only clues. Of those Spanish chroniclers who made any specific mention of resettlement in Loja province, most only referred in general terms to *mitmaqkuna*, although Montesinos (1882 [1642]:137-138) claims that colonists were brought in from Chachapoyas, Xauxa, Andahuaylas, and Cotabamba. The only known document that specifically mentions colonists in Saraguro refers to *mitmaqkuna* who were elite troops in the Inca army (J. Belote and L. Belote 1994c:II:3; L. Belote and J. Belote, editors, 1994:11-12), but unfortunately their ethnic affiliation is not revealed. In contrast, oral traditions among the Saraguros are consistent in referring to their place of origin as either Cuzco or Lake Titicaca. In one case, Collas from Bolivia were specifically mentioned (Moya 1981:55). It is likely that the *mitmaqkuna* of Saraguro included people from both Cuzco and Lake Titicaca, the former perhaps belonging to the Inca ethnic group by birth or by privilege, and the latter likely being Collas. It would not be surprising to find that people from both of

those areas were moved to Saraguro, as they were noted to be transplanted to many different parts of the empire, and in most regions the Incas brought in settlers from several different provinces.

The Inca objectives for undertaking resettlement in Saraguro are likely to have centered on pacification and control of the natives of the region, if they had indeed resisted the Inca conquest. Because the *mitmaqkuna* were apparently trustworthy people settled in defensible hilltop habitations, they were not themselves the focus of pacification efforts. The Incas did not carry out relocation for major economic goals, as there was no concentrated effort to exploit the resources of the region, and certainly no projects requiring an influx of large numbers of outsiders. But there may have been a minor economic element in the Inca strategy, as Collas were often relocated to areas lacking llamas to serve as herders (Murra 1980:156). The Incas may have also had some strategic objectives in mind, oriented toward controlling their main northsouth road, and possibly countering external threats from the east and west; this could account for the presence of *mitmaqkuna* reportedly serving as elite soldiers in the Inca army. Such a scenario agrees with the Spanish chronicler Cobo, who stated that "...the majority of the mitimaes who were made to go to recently subjugated towns settle in the provincial capitals so that they could serve as a garrison and presidio..." (Cobo 1979 [1653]:190). Finally, despite the number of ceremonial sites in the region, religious or ideological objectives were probably not a factor in Inca aims of resettlement, as there were no large-scale ceremonial centers to support, and the settlement patterns did not reflect any major influence of state ideology.

Little can be said about the economic organization of the *mitmaqkuna* of Saraguro beyond speculation based on a few shreds of evidence. It does not appear the Incas intended to focus on intensifying agricultural production or increasing

extraction of natural resources in the area. The majority of the colonists may have simply been generalized farmers, much like their predecessors. But there are a few clues to support the idea that ethnic Collas were in fact brought in as camelid herders. For one, the oral history connects Collas to the community of Oñacapac (Moya 1981:55), the name of which means "royal sheep" ("sheep" being a loose Spanish translation that includes camelids). Furthermore, at least one of the undated corral features noted during the survey were located next to Oñacapac. Of course, llamas and alpacas were major components of the Inca economy throughout the empire, the former serving as pack animals and the latter providing fibers for textiles, so it would not be unusual if herds were established around Saraguro to service passing llama trains and to produce fibers for cloth used and stored at the Inca centers. Therefore, it is quite plausible that Collas were brought to the Saraguro Basin to serve as camelid herders for the state.

The other suggested occupation of *mitmaqkuna* in the region is that of soldier in the Inca army. If such colonists were stationed in the Inca centers, it is likely that they were supported by the state in return for their service rather than providing for their own food, clothing, and shelter. In contrast, the other *mitmaqkuna* (be they camelid herders or farmers) were probably required to support themselves.

Because the population level during the Inca Period appears to have been low, the political structure of the Saraguro Basin was probably not very complex. The Incas undoubtedly organized the region according to their system of decimal administration, and thus the subjects must have been grouped in multiples of ten with leaders at each level. Because there are strong indications that the *mitmaqkuna* were loyal to the state, the different groups were probably organized under their own leaders, up to the level of the large settlements, with all of them united under the

imperial representatives at Villamarca and Tambo Blanco. If the Incas did remove the entire native population of the region, it could have facilitated the implementation of the new decimal system.

The people of the different ethnic groups were probably separated in space, with the Cuzco people settled in the Inca centers, and the Collas (and others, if present) placed in local settlements in the surrounding area. That the oral history of the Saraguros still separate places of origin for the *mitmaqkuna* may reflect the Inca policy of enforcing the maintenance of ethnic identities.

At this point it is difficult to make any reasonable estimate of the numbers of people brought into the Saraguro area; a best guess would put the number in the hundreds, if not up to a thousand or more. In contrast, it is likely that the entire native population was removed from the basin, based on the fact that there were no lower habitations established during the Inca Period and that there are no known ethnohistorical references to pre-Inca people remaining in the region.

As for distribution of the *mitmaqkuna* within the landscape, as mentioned above, if colonists from the Cuzco area were serving as soldiers, they would have been placed in the Inca centers, whereas Collas and any others were settled in the local hilltop habitation sites. The Incas may have decided to place the majority of the colonists in the larger pre-existing settlements for a number of reasons. First, the larger sites would have had the most standing structures and the most available arable land. Second, the larger sites allowed for the concentration of people into fewer locations, facilitating control over them. Third, the re-use of local settlements and their structures could save in investments in time, energy, and resources that would have to be made in clearing land for habitation, constructing homes, and preparing land for agriculture. In addition to houses, the *mitmaqkuna* probably had the use of

ceramics and other artifacts left behind by the relocated natives. Finally, Murra (1980:177) notes that the utilization of existing habitations by *mitmaqkuna* may have been a common practice under the Inca, so it would not be unusual to have been the case in Saraguro. With all of these benefits, this strategy would have reduced investments needed on the part of the Incas in consolidating their control over the region. This would have mitigated the high costs of resettlement, including those of transportation, which were very high if the *mitmaqkuna* came to Saraguro from Cuzco and from Lake Titicaca. The Incas may have also tried to reduce transportation costs by allowing the migrants to only bring a limited amount of possessions; this along with the re-use of local habitations and material goods in Saraguro could explain the lack of distinctive foreign artifacts on the surface of suspected *mitmaqkuna* settlements.

CHAPTER 9: CONCLUSIONS

The following summarizes the major conclusions relating to the objectives of this project: analyzing the Inca strategies of conquest and control of the Saraguro region, and addressing the role resettlement played in those strategies. It is hoped that this project has provided a useful contribution to the study of Inca imperial expansion, and to our understanding of the prehistory of the Saraguro Basin and the southern highlands of Ecuador.

Pre-Inca Occupation

One of the more significant results of this project is the demonstration of strong links between the culture of the Saraguro region and that of the provinces of Cañar and Azuay to the north. Similarities are evident in traits of ceramic from the two areas, and two artifact types found in the survey area, the oversize grinding stones and the tenoned sculptures, have analogs in Cañar and Azuay. The ceramics known from south of the region, in central and southern Loja, have little in common with the Saraguro wares, and no oversize grinding stones or tenoned sculptures have been reported from there either. When combined with other lines of evidence (e.g., toponyms, ethnohistory), the connection of the inhabitants of the Saraguro region to those of the Cañari area is clear. It is impossible to say if the pre-Inca inhabitants of Saraguro considered themselves "Cañaris," but it certainly appears they had a cultural, if not social, affiliation with their neighbors to the north, and in all likelihood had split off from settlements in Azuay province and moved south into northern Loja. There is no longer any reason to believe the Saraguro residents were ethnically "Paltas," as they share little with their southern neighbors, who were themselves probably a loosely-connected collection of ethnically distinct peoples. However, the

people of the Saraguro region may have formed political and/or military alliances with "Palta" people, at least when confronting the Incas, if not before.

In many ways, the pre-Inca occupation of the Saraguro region was typical of the conditions prevailing in much of the Andean world in late prehistory. The local political system was not very complex, likely organized at some sort of chiefdom level, i.e., with a hierarchy of two to three tiers. This was typical of what we know about the Ecuadorean highlands, where there was no group that can be said unequivocally to have been organized at a state level in the late pre-Inca era. It is likely that these local chiefdoms were constantly forming alliances to combat neighboring groups, and that warfare was a major concern. The economy of the Saraguro region was undoubtedly agriculturally based. The area was probably had a more generalized economy than other parts of the Andes, with limited long-distance trade and little occupational specialization, with the possible exception of metalworking. It is possible that camelid herding was also a component of the local economic system, and that other resources found not far outside the survey area were exploited and/or traded. Religious practices probably focused on major features of the landscape, including the mountains Puglla and Acacana, and the unusual rock formation of León Dormido. Rituals were likely conducted at those and other locations within the sacred landscape, and at centralized locations within the habitation sites. Finally, settlement patterns in the Saraguro region show a concentration of occupation within medium to large terraced habitations located on the tops and slopes of hills. While these settlements were not explicitly fortified, their defensible nature was likely a reflection of a concern for warfare.

Perhaps the most unusual aspect of the Saraguro region is the lateness of occupation in the basin, with substantial settlement not evident until the Saraguro

(Integration) Period, which began ca. A.D. 500. Many other places in the Ecuadorean sierra and elsewhere in the Andes have much longer histories. In earlier centuries, people were actually living not far from Saraguro, as shown by sites near Oña and elsewhere lower in the drainage of the Río Jubones. It is unlikely that the survey area was totally unoccupied before then, as some isolated ceramics attest, but the heavy vegetation cover appears to have restrained significant use of the land prior to A.D. 500 because of the heavy commitment of labor required to clear space for habitation and agriculture. There is also very little in the way of flat land around Saraguro, and the weather is cooler and wetter than in neighboring valleys, conditions that could have further discouraged settlement. The abundant flatter, more open land to north and south may have been sufficient to accommodate the native populations for many centuries. An increasing concern with warfare was probably the catalyst that ultimately led to large-scale settlement in the Saraguro Basin. Around the beginning of the Saraguro Period (ca. A.D. 500), or somewhat after, conflict in the inhabited regions to the north may have reached the point where the benefits of isolation and unoccupied territory outweighed the associated costs of moving into Saraguro. Further changes in settlement patterns in the late Saraguro Period suggest concerns with warfare increasingly influenced where and how people lived in the basin.

The Inca Occupation

Prior to this project, little was known regarding the Inca occupation of the Saraguro region, and the available information did not indicate a very significant Inca presence. The present survey data, combined with information from ethnohistory and earlier investigations, reveal the Inca occupation to be more substantial, and present a

fuller picture of the course of imperial conquest and consolidation of control of the region.

When the Inca army arrived in the Saraguro Basin in the mid-fifteenth century, under the command of Topa Inca during the reign of his father Pachacuti, they probably had to conquer the region through force rather than annex it by diplomacy. As noted above, the survey data suggest that local inhabitants were prepared to defend themselves, and at least one Spanish chronicler (Cabello Balboa 1945 [1586]) wrote that the people of the province fortified themselves in Saraguro to fend off the Inca threat. After conquering the region the Incas established a mid-size administrative center at Villamarca, storage buildings at León Dormido, and ceremonial sites at Las Lagunas and El Baño del Inca/Las Cuevas. In the Las Juntas drainage to the south, they followed a similar plan by creating a mid-sized administrative site at Tambo Blanco, storage houses at Buco, and a ceremonial site at Ingapirca.

The Inca strategy for consolidating their control over the Saraguro region included establishing direct imperial rule from Villamarca and Tambo Blanco, imposing their decimal administration system, and subsuming the area under the greater political division of Hanan Cañar (or Upper Cañar), the division of Cañari territory closest to Cuzco geographically. The empire routed its main north-south road through the region, and in all likelihood, they removed most, if not all, of the local inhabitants and replaced them with *mitmaqkuna* from elsewhere in the Andes. The Incas established the imperial religion in the region, and oriented ceremonial practices toward the local sacred landscape, most likely incorporating into their rituals the native sacred landmarks including Puglla, Acacana, and León Dormido, and focusing additional attention on other natural features that were important in the Inca religion, such as waterfalls and small bodies of water. The Inca strategy of economic

exploitation of the region is unclear, but their approach did not appear to emphasize an increase in production of food, raw materials, or finished goods. The Incas may not have perceived the area to have much economic value, with the locals lacking specialized skill and the landscape harboring little in the way of major resources.

Over all, along the territorial-hegemonic axis, the Inca approach to the conquest and consolidation of control of the Saraguro region was very territorial in nature: acquiring the land by military force, imposing direct rule, constructing a number of imperial installations, creating shrines and other features in the process of establishing the state religion, subjecting the area to resettlement, and routing their main north-south road through the area. In addition, it appears the Incas held the Saraguro region in high regard, as indicated by the cut stone architecture found at Villamarca, Tambo Blanco, and Ingapirca. The amount of fine stonework present is greater than seen in many regions within the Inca Empire, in fact, this type of architecture is relatively rare outside the Cuzco region (Hyslop 1990; Malpass, editor 1993). However, the economic exploitation of the region was apparently minor, contrary to what would be expected with the sort of high cost territorial approach followed by the Incas. In fact, those costs were quite high relative to the limited economic gains, which suggests that the area was a constant economic drain on imperial resources.

Why did the Incas accord the Saraguro region with this high status, and why were they willing to accept such high costs for low economic gains? In large part, the importance of the region may have rested on external factors that become apparent when considering the greater context of Saraguro within the southern highlands of Ecuador. Foremost, Saraguro lies along the route of the main north-south Inca highland road. This road was the most important in the empire, as it connected the

two most important Inca cities, Tomebamba, which was akin to a second Inca capital during the reign of Huayna Capac, and Cuzco, the traditional seat of Inca power. Because Saraguro was situated just to the south of Tomebamba, the stretch of road running through the area was vital for the passage of goods, messages, soldiers, and the Inca elite to and from Tomebamba and Cuzco. Practically the same could be said for any stretch of the Inca road between those two cities, but the strategic location of Saraguro may have made elevated its importance. At the point where Saraguro is situated in the Andes, the borders of the Inca Empire became restricted to a highland corridor, narrowed down considerably from their more encompassing range in northern Peru. Along the western side of the Andes, the Incas controlled the entire coast of Peru, but did not effectively control land north of Tumbez, which lies near the modern border of Ecuador. To the east, (i.e., the eastern flanks of the Andes and the Amazonian lowlands), Inca territory was quite expansive in northern Peru, including the Chachapoyas region, among others. But in the province of Loja in southern Ecuador, there is no indication that the Incas controlled much, if any, land on the eastern flanks or in the lowlands. This meant that Saraguro was situated near both the eastern and western exterior imperial borders, and because the Amazonian lowlands were only a day's walk away, the eastern frontier was especially close. This narrowing of the Inca domain in Ecuador also caused the constriction of the Inca road network. The system of parallel north-south roads along the coast and sierra of Peru, which were inter-connected with lateral routes, shifted in the Ecuadorean highlands to one main north-south road with occasional subsidiary paths. In fact, the last connector road from the coast in the northern part of the empire must have met the main north-south highland route somewhere near Saraguro.

Consequently, the Saraguro region was exposed to external threats on the east and west, and it was a vital link to the northernmost provinces of Tawantinsuyu. If the Incas lost control over Saraguro due to invasion or internal rebellion, then the northern part of the empire would have been cut off from the capital, Cuzco, and the rest of the Inca domain, with major impacts to communication, transportation of goods and people, and movement of the military. This vulnerability applied as well to the other highland regions in Ecuador, but Saraguro was somewhat special because it was the southernmost weak link, and if it had fallen, it would have meant the isolation of Tomebamba. Continued control over Saraguro was thus necessary to hold the empire together and to facilitate the continuing conquests at the northern extent of Tawantinsuyu. These conditions did not pertain to Peru, where control over the coast provided alternate routes should a highland province fall to rebellion or invasion, and vice versa. It is probable that the two additional north-south Inca roads that were said to parallel the main route through the Saraguro region (Caldas 1912, Uhle 1923) were an Inca strategy to provide similar alternatives to maintain links between the northern provinces and the rest of the empire.

The strategic importance of the Saraguro region may have been sufficient for the empire to establish direct control over the region and replace the local population with more loyal subjects, but does not necessarily explain the level of status accorded to the region, which is indicated by the presence of cut stone architecture in several locations. The answer to that question may depend on both internal and external circumstances. The sacred features of the Saraguro landscape, including the unusual landform of León Dormido, the impressive peaks of Puglla and Acacana, the reverse continental divide at Ingapirca, the various waterfalls and rock shelters, may have led the Incas to hold the region in high regard because of its religious significance. In the greater context of Inca imperial geography, the Saraguro region may have been located within a sphere of elevated political and ritual importance surrounding the Inca city of Tomebamba. Because Tomebamba was becoming essentially the second Inca capital, it is very likely that the surrounding province was analogous to the region surrounding Cuzco, where the natives were accorded special status and important shrines and sites with fancy cut-stone architecture were abundant. Saraguro, situated at the southern end of the Inca province of Hanan Cañar, may well have been the entry point to the sacred realm of Tomebamba, with Tambo Blanco as the first significant outpost. In this context, an *usnu* at Las Lagunas, and a bath and stairwell carved in the bedrock at El Baño del Inca make perfect sense, as does fine masonry at the centers of Tambo Blanco and Villamarca, and at the ceremonial site of Ingapirca.

Although it is not a revelation that the Incas used direct, territorial methods of control in some parts of Tawantinsuyu, as in Saraguro, and indirect, hegemonic methods in others, much of the discussion of Inca provincial administration has focused primary importance on economic production, and to some extent on military issues on the farther frontiers of the state. In contrast, the Inca occupation of Saraguro appears to have been a case where economic considerations were secondary. It appears that, to the Incas, the combination of the strategic importance of the Saraguro region, its sacred landscape, and its position within the sphere of Tomebamba were valuable enough to balance the low economic returns from the area and the relatively high costs of conquering and consolidating control over it. The case of Saraguro illustrates the importance of considering a broader range of factors, not just those of political economy, that could affect processes of imperial conquest and consolidation in the analysis of Inca provincial strategies.

Forced Resettlement

While the survey did not furnish definitive evidence of *mitmagkuna* in the Saraguro region, there is good reason to presume that the Incas did indeed remove local inhabitants and replace them with settlers from elsewhere in the empire. Local oral history and the fact that the Incas subjected almost all of their provinces to relocation are strongly suggestive. Furthermore, the results of this project indicate that the Incas did not force the natives of Saraguro to abandon their hilltop habitations and move to new, lower, less defensible settlements, which was standard Inca practice in provinces where they encountered resistance to conquest but allowed the inhabitants to remain in their native land. Because archaeology and ethnohistory point toward such defiance in the Saraguro region, and the survey shows that at least some of the local hilltop habitations continued to be occupied in the Inca Period, it is not unreasonable to conclude that the locals were forcibly removed from the province and *mitmaqkuna* were brought in to re-inhabit existing settlements. It is likely those *mitmaqkuna* were brought in from both the Cuzco region and from around Lake Titicaca, two places of origin mentioned in oral history, and perhaps from other provinces of the empire.

In regards to methodology, the results underscore the difficulties of recognizing *mitmaqkuna* settlements based on surface materials. In Saraguro, there are three factors that could explain the lack of conclusive evidence. First, the short duration of the Inca Period may not have been sufficient for the accumulation of significant deposits of archaeological materials that could be recognized on the surface. This can have a great effect in an environment of heavy vegetative cover and rapid soil formation, as is characteristic of Saraguro. That effect may be somewhat balanced by the late prehistoric date of the Inca occupation, which increases the

probability that remains are closer to the surface. Second, the probable re-use of local settlements by the colonists would preclude the establishment of distinctive new settlements. Furthermore, if local houses and other structures were re-used, this greatly reduces the chances of finding architectural remains diagnostic of the new inhabitants. Third, *mitmaqkuna* may have also re-utilized the native people's material goods, meaning they would have produced fewer durable goods of their own. If the colonists did not include skilled craft workers, which is conceivable given that the Incas often relocated groups of specialists separately from people with more general skills, the items produced would have been more utilitarian, and thus less distinctive. These same conditions are likely to pertain to different degrees in other regions of Tawantinsuyu, depending on local environmental conditions and the particular resettlement strategy pursued by the Incas. The chances of positively identifying the presence of *mitmaqkuna* via survey are greatly increased in more arid environments with little ground cover, and in cases where the Incas required the establishment of new settlements for the colonists. However, the conclusions from this project that the *mitmaqkuna* were likely placed in the existing habitation sites where Inca-style artifacts were found matches the results from the few other archaeological projects reporting finds of suspected *mitmaqkuna* sites. This growing body of results suggest a strong pattern that may be the prevailing one in the Andes, with the implication that the Incas preferred the cost-saving strategy of resettling people into vacated local sites, and that the *mitmaqkuna* were accorded some level of status by way of having access to Inca-style goods or being allowed to manufacture their own imitations.

Although the lack of definitive evidence for the presence of *mitmaqkuna* in the Saraguro Basin precluded applying the entire theoretical framework developed in Chapter 1 to the imperial strategies for resettlement in the region, a few tentative

points can be made, which may relate to general practices of the Inca state. On the whole, the Inca objectives of resettlement in Saraguro were focused on pacifying the region and maintaining their control over a strategically important province in the empire. Relocation met these ends by removing what were likely to have been hostile natives and replacing them with more loyal people from elsewhere in the empire. Economic expansion was not a major goal in the region, and the occupations of the *mitmaqkuna* were probably oriented toward supporting the Inca presence in the region rather than providing labor or producing a surplus of goods for use outside the province. The costs of relocation were undoubtedly high, given the likely scenario of the removal of many of the local people and replacement with people from as far away as Lake Titicaca. These costs were mitigated by having the colonists re-inhabit the vacated settlements. The *mitmaqkuna* probably included generalized farmers and camelid herders, who would have lived in various settlements around the countryside, and possibly soldiers, who may have been stationed with the Inca center of Villamarca. Within the structure of decimal administration imposed on the region, the colonists likely filled the lower positions of authority, with direct imperial control at the top level.

Ethnohistory leaves no doubt that forced relocation was an integral part of Inca methods of provincial expansion and maintenance, a strategy that was territorial by nature of its high costs of implementation. The greatest benefits the Incas gained through resettlement were in facilitating pacification and control in most provinces, while in some cases, economic expansion was also an important part of the equation. Saraguro appears to represent a situation where security, i.e., maintaining control over a strategically location in the northern part of the empire, may have had priority over maintaining control over the resident population, exploiting labor and other resources,

or any other possible objectives. This case emphasizes that issues of security on the larger scale should be given ample consideration in any analysis of Inca provincial occupation, and in the investigation of early empires in general.

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APPENDIX: PROJECT SITE NUMBERS AND OFFICIAL SITE NUMBERS

Project site numbers were assigned sequentially as sites were recorded in the field, with the exception of the last four sites, which were given separate site numbers later. The official site numbers are assigned based on which 1:50,000 topographic map covers their location; they are numbered sequentially and according to the alphanumeric designation assigned to the individual map, as follows:

NVI-D4	Saraguro 1:50,000 quadrangle
NVI-D3	Selva Alegre 1:50,000 quadrangle
NVI-F1	Santiago 1:50,000 quadrangle
NVI-F2	Las Juntas 1:50,000 quadrangle

Site Name	Project Site Number	Official Site Number
Condor Qaqa	Sar-1	NVI-D3-01
Shindar	Sar-2	NVI-D4-01
Las Cuevas/Baño del Inca	Sar-3	NVI-D4-02
Loma Huelemón	Sar-4	NVI-D4-03
Quisquinchir	Sar-5	NVI-D4-04
Guandug Loma	Sar-6	NVI-D4-05
San Vincente Bajo	Sar-7	NVI-D4-06
San Vincente Alto	Sar-8	NVI-D3-02
Torre Eléctrico/Cuypamba	Sar-9	NVI-D4-07
Pucuna	Sar-10	NVI-D4-08
Quillutoro/El Quingo	Sar-11	NVI-D4-09
Dutazhuma	Sar-12	NVI-D4-10
Loma Ducapale/Loma Pucara	Sar-13	NVI-D4-11
Sigse/Cabishapa	Sar-14	NVI-D4-12
León Dormido	Sar-15	NVI-D4-13

Site Name	Project Site Number	Official Site Number
Cochapamba	Sar-16	NVI-D4-14
Huiñashapa Bajo	Sar-17	NVI-D4-15
Villamarca/Paredones	Sar-18	NVI-D4-16
Ingapirca	Sar-19	NVI-F2-1
Quillosisi/Pucara	Sar-20	NVI-D3-3
Cuypamba	Sar-21	NVI-D4-17
Gentil Loma	Sar-22	NVI-D4-18
Cruz Loma/Ñamarín	Sar-23	NVI-D4-19
Pucara	Sar-24	NVI-D4-20
Tuncarta	Sar-25	NVI-D4-21
Huashapamba	Sar-26	NVI-D4-22
Namarín	Sar-27	NVI-D4-23
Tuncarta II	Sar-28	NVI-D4-24
Huaylashi	Sar-29	NVI-D4-25
Llinlla	Sar-30	NVI-D4-26
Huiñashapa	Sar-31	NVI-D4-27
Pucara	Sar-32	NVI-D4-28
Loma de la Cruz	Sar-33	NVI-D4-29
Loma de Casetas/Pucara	Sar-34	NVI-D4-30
León Pugllana/Pucara	Sar-35	NVI-D4-31
Manzana Loma	Sar-36	NVI-D4-32
Yarimala Bajo	Sar-37	NVI-D4-33
Ruda Loma	Sar-38	NVI-D4-34
Gualshiu	Sar-39	NVI-D4-35
Gentil Loma	Sar-40	NVI-D4-36
Baber	Sar-41	NVI-D4-37
Ilincho	Sar-42	NVI-D4-38
El Entable/Guandug/Yarimala	Sar-43	NVI-D4-39

Site Name	Project Site Number	Official Site Number
Molino Viejo	Sar-44	NVI-D4-40
Tintaturo	Sar-45	NVI-F1-01
Quebrada Honda	Sar-46	NVI-F1-02
Tambo Blanco	Sar-47	NVI-F2-02
Inca Storage Units at León Dormido	Sar-48	NVI-D4-41
Las Lagunas	Sar-49	NVI-D4-42