# NATURAL ENGAGEMENTS AND ECOLOGICAL AESTHETICS AMONG THE ÁVILA RUNA OF AMAZONIAN ECUADOR

**by**

**Eduardo O. Kohn**

**A dissertation submitted in partial fulfillment of**

**the requirements for the degree of**

**Doctor of Philosophy**

**(Anthropology)**

**at the**

**UNIVERSITY OF WISCONSIN-MADISON**

**2002**

**© Copyright by Eduardo O. Kohn 2002**

**All Rights Reserved**

# Table of Contents

**Acknowledgments** **iii**

**Map** **vi**

**Introduction** **1**

**Chapter One** **26**
**The Aesthetic of the Immediate**

**Chapter Two** **74**
**The Leaf That Grows Out Of Itself**

**Chapter Three** **108**
**The Perspectival Aesthetic**

**Chapter Four** **142**
**Ecosemiotics and Metaphoric Ecology**

**Chapter Five** **172**
**How Dogs Dream:**
**Ecological Empathy and The Dangers of Cosmological Autism**

**Chapter Six** **219**
**The World of the Game Masters**

**Chapter Seven** **265**
**Wearing Whiteness:**
**An Amazonian Strategy for Harnessing Power**

**Chapter Eight** **316**
**Historical Process:**
**Co-construction, Maintenance, and Change in Ecological Cosmology**

**Chapter Nine** **336**
**Strategies of Access:**
**Tapping the Wealth of the Forest**

**Conclusions** **391**

**Appendix One** **411**
**Collected Plants**

**Appendix Two** **435**
**Collected Fungi**

**Appendix Three** **436**
**Collected Invertebrates**

**Appendix Four** **447**
**Collected Fishes**

**Appendix Five** **449**
**Collected Herpetofauna**

**Appendix Six** **453**
**Collected Mammals**

**Endnotes** **455**

**Bibliography** **471**

# Acknowledgements

My field research was made possible through a National Science Foundation Graduate Fellowship, a Wenner-Gren Foundation for Anthropological Research Pre-Doctoral Grant, and a Fulbright-Hays Doctoral Research Abroad Grant. Preliminary field research was supported by a Fulbright Grant for Graduate Study and Research Abroad as well as a University of Wisconsin-Madison Latin American and Iberian Studies Field Research Grant. Write-up was supported by a UW-Madison Academic Year University Fellowship and a School of American Research Weatherhead Resident Scholar Fellowship. I would like to thank all of these institutions for their generous support.

I consider myself extremely fortunate to have been able to have spent a year at the School of American Research in Santa Fe, New Mexico. This institution has provided an unequaled environment for writing. I wish to thank all the staff members for making my stay so enjoyable and productive. I especially wish to thank Nancy Owen Lewis, Director of Academic Programs. I also wish to thank Cynthia Welch for her helping me format the final draft.

I also wish to thank the other SAR 2001-2002 Resident Scholars and their families for their friendship and support: Brian Klopotek and Shadiin Garcia, David and Weisu Nugent, Steve and Carolyn Plog, Katie Stewart, and Dennis and Barbara Tedlock. I would especially like to express my gratitude to Katie for her willingness to thoughtfully engage with my work and for encouraging me to develop my ideas about engagement, to Dennis for his constant curiosity about the Quichua language and Runa nature knowing and for generously reviewing most of the sound recordings and transcriptions of the speech I analyze in this dissertation, to Barbara for commenting on an early draft of Chapter Five, and to David for many stimulating discussions regarding how to improve the argumentation of the dissertation. I am also indebted to Steve and David for all of the professional guidance that they have given me. Finally, I am very grateful to Barbara and Dennis for having me stay with them in their Santa Fe house during the final phase of revisions.

I wish to thank the Graduate Coordinator Peg Erdman and the Department Administrator Maggie Brandenburg of the Department of Anthropology at UW-Madison for their tireless and efficient support throughout my graduate career.

In Madison it has always been reassuring to be able to count on Melania Alvarez and Alejandro Adem. I thank them.

I wish to thank my dissertation committee members: Paul Nadasday, Frank Salomon, Steve Stern, Neil Whitehead, and Karl Zimmerer. Each member provided thoughtful and extremely constructive commentary on my dissertation. I am especially indebted to Neil Whitehead for a series of very productive exchanges, both in Santa Fe and in Madison, that have helped me to clarify my argument substantially.

Few students have the good fortune to have an advisor like Frank Salomon. Writing this dissertation with the knowledge that Frank would creatively and critically engage with it has been both liberating and motivating. I cannot think of a better interlocutor. His intellectual breadth, depth, and continual sense of wonder about the world will always serve as inspiration.

I would also like to thank Chris Garces for commenting on a draft of the first chapter.

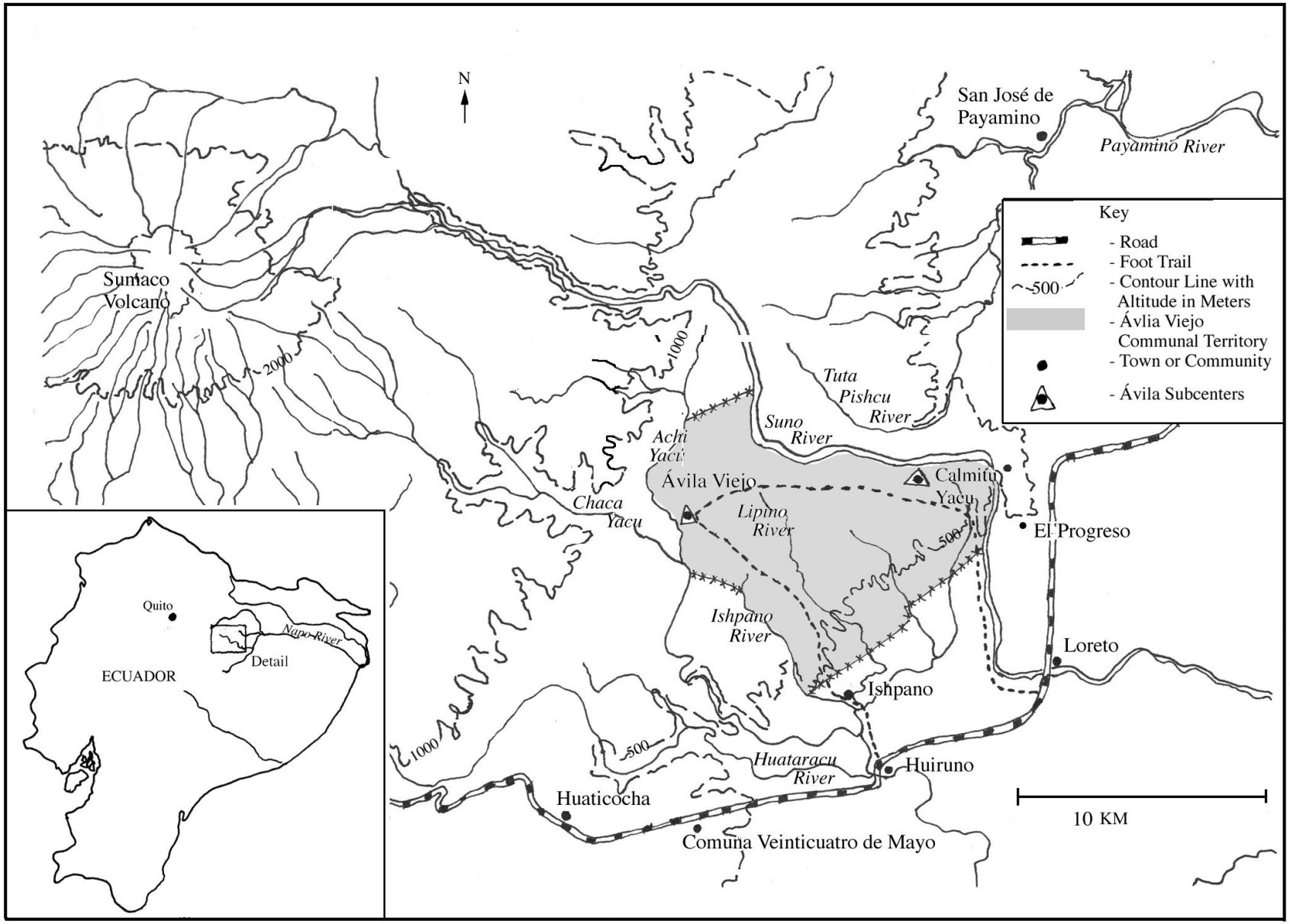
In Quito I wish to thank the members of the Comisión Fulbright, especially the former Executive Director Gonzalo Cartagenova and Helena Saona, as well as the current Executive Director Susana Cabeza de Vaca. I also would like to thank David Neill, Curator at the Missouri Botanical Garden and a long time affiliate of the Herbario Nacional del Ecuador for his careful revision of my botanical collections. I am also indebted to Efraín Freire for working with my collections. For their botanical determinations I wish to thank: M. Asanza (QCNE), S. Báez (QCA), J. Clark (US), C. Dodson (MO), E. Freire (QCNE), J. P. Hedin (MO), W. Nee (NY), D. Neill (MO), W. Palacios (QCNE), and T. D. Pennington (K). I also am very grateful to Luis Coloma and Giovanni Onore and their students at the Museo de Zoología, Universidad Católica, for their help and enthusiasm regarding my project. Tropical biology is a vibrant and exciting field in Ecuador, and this is due in large part to the dedication of the faculty and students at the Universidad Católica. I wish to thank G. Onore as well as M. Ayala, E. Baus, C. Carpio, all from

QCAZ, and D. Roubick (STRI) for determining my invertebrate collections. I wish to thank L. Coloma as well as J. Guayasamín and S. Ron, from QCAZ, for determining my herpetofauna collections. I wish to thank P. Jarrín (QCAZ) for determining my mammal collections. I wish to thank Ramiro Barriga of the Escuela Polítecnica Nacional for determining my fish collections. I am also grateful to the late Fernando Ortiz Crespo for many discussions about my project, especially in its ornithological aspects. I would like to thank the anthropologists Diego Quiroga of Universidad San Francisco, Quito and Ernesto Salazar, of Universidad Católica, for their friendship and interest in my research.

In Loreto I would like to thank Father Mario Perín of the Misión Josefina for his warm hospitality and for providing lodging and meals at the mission on my way in and out of Ávila. I also would like to thank the Verdezoto family, especially don Adán and doña Clelia for their friendship and help on several occasions.

My greatest debt of gratitude is to the people of Ávila. I wish to thank each of them for their generosity and patience. The periods I spent in Ávila have been some of the happiest, most stimulating, and also most tranquil ones of my life and this, in no small measure, is due to them. **Ashca pagarachu. Mana "lambasa" quilcarcanichu**.

Finally, I would like to thank my parents Anna Rosa and Joe and my sisters Emma and Alicia for their love and support. My relatives in Quito also deserve special thanks. I always found inspiration at Vera Kohn's house. My uncle Alejandro Di Capua and his family where always there for me. Finally, I will always be indebted to my late grandfather Alberto Di Capua and my grandmother Costanza Di Capua, not only for providing me with my home in Quito but also for getting me started on this path in the first place.


N
San José de Payamino
Payamino River
Sumaco Volcano
2000
1000
Tuta Pishcu River
Suno River
Achi Yacu
Ávila Viejo
Calmitu Yacu
Chaca Yacu
Lipino River
500
El Progreso
Ishpano River
Loreto
Ishpano
1000
500
Huataracu River
Huiruno
Huaticocha
Comuna Veinticuatro de Mayo
10 KM
Key
- Road
- Foot Trail
- Contour Line with Altitude in Meters
- Ávlia Viejo Communal Territory
- Town or Community
- Ávila Subcenters
Quito
Napo River
Detail
ECUADOR

vi

# Introduction

## The Argument

This dissertation is concerned with how the Quichua (Quechua) speaking Runa of the village Ávila Viejo (Orellana Province) in Amazonian Ecuador –whose lifeways are characterized by swidden agriculture, hunting, fishing, gathering, and incipient cash cropping and occasional wage labor– experience, engage with, and attempt to make sense of the complex neotropical rainforest environment in which they live. I combine ethnographic, poetic, ethnobiological, and historical approaches to capture this. I also explore the implications of this process for anthropological attempts to understand human-nature relationships more broadly.

I argue that Runa ecological knowledge grows out of culturally specific aesthetic orientations that arise in contexts of intimate engagement with the minutiae of biological processes. These aesthetic-based orientations are central to the ways in which the Runa grapple with fundamental existential problems as well as with practical ecological ones. By studying these orientations and the models they inform, I attempt to trace the elaborate reticulations among meanings and the world as well as those among socio-cultural processes and environmental perception. The ways in which these elements interact in the making of local nature knowledge can best be understood by studying specific moments of ecological engagement as well as local poetic attempts to recreate, or reflect on, such experiences. Such a focus indicates how knowing is more than a form of representation; it is also part of a lived engagement. Natural engagements, however, can also be problematic; reflections about forest experiences are as much about knowing as they are about confronting the ways in which meaning can break down in the face of the unpredictable complexity of the world.

The aesthetic orientations I isolate constitute an important generative element of the more abstract cosmologies that are often taken as the starting points for anthropological studies of ecological knowledge. In Amazonia such cosmologies also reflect the social milieu out of which they

emerge. Because Ávila has been involved in larger regional as well as state political and economic spheres for centuries, the social order visible in Runa cosmology is decidedly translocal; ecological understandings, then, are also ways of engaging with history.

The organization of this dissertation is somewhat unusual. My interest in the ethnographic description of forest experience leads me to assume a position of false naiveté or heuristic bracketing. That is, the dissertation begins with trying to understand how people make sense of forest experience through the ways in which they speak about it. I initially bracket off these experiences from considerations regarding how they may relate to broader structuring principles –say, from the domains of cosmology and social organization. As the dissertation progresses, I move successively to a more abstract view of how people understand nature and such principles acquire an increasing importance in my argument.

Because I have organized my ethnographic treatment in this way, I have also preferred to postpone until the Conclusions discussion of how my argument relates to other research on Amazonian conceptions of nature. Deferring discussion in this fashion allows me to present the ethnographic corpus before discussing my work in the context of the literature. This allows me to explain in a more efficient and forceful manner my contribution to existing debates. In what follows I give a brief outline of how my approach differs from these other research programs.

There are four important approaches to the study of the natural in Amazonianist anthropology: cultural ecology, ethnobiology, traditional ecological knowledge (TEK) and the related study of traditional resource management, and social anthropology. Cultural ecology attempts to create simplified models of people's ecological relationships because this is the only way in which such relationships can be productively studied using "scientific" methods. Although I agree with cultural ecologists that biology plays an important role in how people interact with the environment, I feel that much of the complexity of these interactions is lost if one tries to drastically reduce the number of variables inherent to them (something that must be done in order to generate testable hypotheses); embracing science does not always entail adopting quantitative methodology.

In my work I also employ some methods and concepts from ethnobiology. I find this approach very useful for documenting the enormous range of organisms with which Amazonians interact. However, ethnobiological approaches tend to overemphasize the structuring aspects of taxonomy and nomenclature. It often becomes unclear whether these categories exist in nature, in the mind, or in culture. This makes it difficult to understand the ways locals actually go about engaging with the environment and how they reflect on these experiences.

Like ethnobiology, TEK and resource management approaches are important for documenting what locals know about nature. However, adherents of these approaches situate this knowledge within western scientific and utilitarian frameworks. This makes it hard to understand the non-scientific epistemologies that generate this local knowledge in the first place.

Social anthropology has been very successful at showing the ways in which the domains of the social and the natural are used to understand each other. It has also helped us understand the complex processes by which these two domains often become part of one conceptual system that informs activity. However, the tremendous emphasis this approach places on the social is, I believe, in large part an effect of focusing on the construction and maintenance of social ties and institutions.

The social is not the only lens through which to understand people's conceptions of nature; focusing, by contrast, on how individuals experience the complexity of ecosystems can point to engagements with a natural world that are less intimately tied to overtly social spheres. This can reveal certain situated orientations that generate knowledge. It can also reveal how people struggle to come to terms with complexity. There is no overarching system that the Runa use to "capture" nature because the world constantly defies people's attempts to define it.

**Dissertation Summary**

The starting points for so many studies of ecological knowledge are folk biological models, especially as these pertain to the classification of organisms. By contrast, I begin the first

chapter –*The Aesthetic of the Immediate*– by identifying aesthetic orientations that grow out of and inform ecological practice. This shift in emphasis –from models to aesthetics– permits me to understand Runa experiences of knowing. Such a focus requires an attention to how the Runa make creative use of language to talk about the forest.

In large part through the creative use of language, the Runa cultivate what I call an "aesthetic of the immediate" that encourages them to be attentive to immediate forest experience and to attempt to transmit this to others. This process constitutes an implicit local theory about the way in which the relation between humans and the world should be understood. The approach that the Runa aesthetic embodies, in turn, encourages us to see knowledge about nature not as a cultural construction or a biological or cognitive given but as emergent in experience as it is lived, heard, and spoken.

The second chapter –*The Leaf the Grows out of Itself: Ecological Knowledge and Biological Realities*– constitutes an attempt to establish a framework that can address how knowledge –which is dependent on cognitive abilities and socio-cultural categories– can access a reality which is independent of these human constructs. I do this by exploring how a number of approaches might explain the Runa classification of anomalous organisms.

Although people do not enjoy unimpeded access to an unchanging biological reality –as some would like to argue– they can, nevertheless, know a biological world that exists independently of them. I draw on the works of the philosophers Roy Bhaskar, Hilary Putnam, as well as an approach to ecology known as ecosemiotics, to develop a framework through which Runa ecological knowledge can be seen to be true to a certain kind of biological reality even if it is also cognitively, culturally, and historically situated.

The third chapter – *The Perspectival Aesthetic*– turns to an exploration of point of view. This is an extremely important element of a Pan-Amazonian cosmological system known as per-

spectivism. Many ethnologists see perspectivism as solely a socio-cultural phenomenon. By contrast, I attempt to show how a perspectival aesthetic, which ultimately informs these more abstract models, emerges out of fundamental challenges associated with making sense of and tapping into a complex ecological system. Foremost among these challenges is the problem of developing empathy for other beings. Although this aesthetic is grounded in problems of ecological engagement, it also infuses Runa sensibilities in ways that ultimately retain little apparent connection to ecology.

Chapter Four –*Ecosemiotics and Metaphoric Ecology*– is concerned with how ecological relationships are understood in Ávila. The first part discusses the Runa view that ecology is semiotic. The Ávila Runa see ecological connections as primarily communicative rather than mechanistic. That is, they are "ecosemiotic." This is because the Runa, in many contexts, understand forest beings to be sentient subjects and not law-governed objects. The second part of this chapter explores the prevalent use of metaphor in the ways in which the Runa see organisms to be semiotically linked in the environment.

My interest in this chapter is not so much in how metaphor and other aspects of ecosemiotics form part of a representational model of nature. Rather, I am concerned with how such communicative links are seen to have force and how people can access that power to say and do things in the world of beings.

The fifth chapter –*How Dogs Dream: Ecological Empathy and the Dangers of Cosmological Autism*– forms a bridge between the first four chapters and the final four of this dissertation. Chapters One through Four are concerned primarily with ecological knowing and the various ways in which such acts are related to the natural world. Chapters Six through Nine, by contrast, focus on more abstract elements of ecological cosmology, primarily as these relate to the larger socio-political and economic milieu in which the Runa are immersed. As a bridge, it is fit-

ting that the fifth chapter focuses on dogs and jaguars, for these are seen as crucial mediators between various domains: between the village and the forest, as well as between local and outsider spheres. In terms of approach, this chapter also connects the first and last sections in that it deals with material that is at an intermediate level of conceptual abstraction between an aesthetic orientation and a somewhat more removed cosmology.

This chapter attempts to resolve an apparently trivial ethnological conundrum regarding the different ways in which the Runa interpret the dreams of their dogs, as opposed to the ways in which they interpret their own dreams. As it turns out, this comparison can provide a host of insights into Runa ecological understandings. The ecological challenge for the Runa is to understand how organisms that possess radically different ontologies understand the world so that they, in turn, can establish or avoid communication with them. The question of what and how dreams mean, then, is fundamentally an ecological one for the Runa because dreaming is part of an attempt to understand and act within the web of relationships that connects different kinds of beings.

Chapter Six –*The World of the Game Masters*– is the first of four chapters on ecological cosmology. It deals primarily with the beings that are thought to control animals in the forest. These game masters are often thought of as powerful outsiders such as priests and estate owners. Although Runa ecological cosmology –especially as it pertains to game masters– is very traditional in logic, it is also outward looking and innovative in content. Traditional game master cosmologies portray a socialized nature by projecting local ideas of the social order onto nature. Because the Runa see themselves as part of a greater nation-state, they project this larger translocal –and changing– view of society on the forest. Understanding local ecological cosmology, then, is also a way of studying history.

Outsiders play a central role in Runa ecological cosmology. The game masters, demons, and in certain contexts the Runa and animals as well, are thought of in one way or another as

white. Chapter Seven –*Wearing Whiteness: An Amazonian Strategy for Harnessing Power*– attempts to address what whiteness means locally and how its power can be harnessed. Whites have come to index a condition of power and, as such, the Runa incorporate their attributes into their notions of selfhood. They can do this because Amazonian understandings of whiteness are informed by a radically different view of ontology –one that is quite at odds with western folk views regarding biological race. According to the Runa, whiteness is an attribute that, like clothing, can be put on and taken off and therefore transferred from one being to another. In this chapter, I show how this is manifested by looking at various ways in which Amazonians understand the relationship of bodies and their markers to different kinds of beings.

In Chapter Eight –*Historical Process: Co-construction, Maintenance, and Change in Ecological Cosmologies*– I am interested in understanding the generative processes by which spaces such as the game master world came about as well as how they are maintained ideologically. Although in the previous two chapters I have indicated that Runa ecological cosmology is anything but traditional in content, I only address in this chapter how such understandings might emerge.

To get at this generative process, I examine moments of dialogue between outsiders and Amazonians. What is so striking about these is the ways in which outsiders seem to unwittingly recreate elements of Runa ecological cosmology with uncanny accuracy. I suggest that this is in part the case because such cosmologies are something more than cultural. Runa ecological cosmology is not just a locally bounded culturally specific representation of the forest. Rather, it can also be seen as a kind of dialogue with the powerful beings that are seen to control animals in the forest. Because in many ways outsiders, such as priests and explorers, are similar to these beings, they too are able to understand the supplications that the Runa make to the game masters.

Another point I make in this chapter is that despite the validation of "unmediated" experience in knowing the forest and the obvious historical nature of so many ideas of the natural envi-

ronment, ecological knowledge appears to the Runa as unchanging. There seems to be in Ávila an ideology of stasis and this exists in tension with a world in flux.

The final chapter – *Strategies of Access: Tapping the Wealth of the Forest*– is concerned with how the Runa develop strategies of access to the goods –primarily game meat– of the forest. Like urban centers and other domains of whites, the forest is seen as a repository of enormous wealth that can only be tapped by establishing relations of exchange with powerful beings. Commerce with game masters is driven by the same aspirations –and also follows the same norms of etiquette– as exchange with outsiders more generally.

The idea that the goal of ecological understanding and practice is access –as opposed to the creation of some sort of body of knowledge-as-representation– links the economic strategies I have discussed in this chapter with the poetic strategies with which I began this dissertation; both are forms of engaging with the forest and its beings.

**The Setting**

In what follows, I present a brief introduction to the people of Ávila, their history and lifeways, as well as the socio-political and environmental contexts in which they live.

I refer to the people in Ávila as Runa. The term means person or man and it is the native language term of self-reference throughout Quichua and Quechua speaking regions.[1] I use the term Runa, however, with some hesitation. Among Ecuadorian Spanish speakers, the term *runa* has acquired a negative connotation. Shoddy work is considered *runa*, mutts or cattle that lack a pedigree are *runa*, and any behavior that is considered uncivilized can also be classed as *runa*. In the Ecuadorian Amazon or Oriente, as the region is also called, colonists will often refer to local Indians as *runahua*. -**Hua** is a diminutive suffix in some lowland dialects, the equivalent of the highland suffix –**gu**. This is not necessarily used in a condescending fashion although a certain paternalistic relation is implied in its use.

The most locally accurate term for the people of Ávila would be the **Avila Runa** or **Avilaguna** (those from Ávila) because people in this village refer to Quichua speakers from other villages in similar fashion. For example, they refer to people from San José de Payamino as the **San Jusi Runa**, or more commonly as the **San Jusiguna**, the people from Loreto are the **Luritu Runa** or **Lurituguna**, etc. My use of the term Runa should be seen as shorthand for Ávila Runa or, depending on the context, for lowland Quichua-speakers from other regions as well. People in Ávila rarely refer to themselves as "the Runa." This is not because the term Runa is seen in a negative fashion. Rather, this fact seems to be associated with the nature of self-reference; ethnonyms are for talking about others, not for talking about oneself.

***History***

The Quichua-speaking Runa of Amazonian Ecuador number approximately 40,000 (Taylor 1999: 191). The Ávila Runa are closely related in terms of linguistic dialect, customs, and intermarriage to people from nearby San José de Payamino (Irvine 1987) and Loreto (Hudelson 1987), although these are all locally thought of as separate communities with distinct histories and customs. The Runa from Ávila, San José and Loreto, when taken together with those from other communities in the Upper Napo River region, form part of a group that has sometimes been called in the literature the Quijos Quichua. The other major group of Quichua-speaking Runa in lowland Ecuador is the Canelos Quichua whose cosmology has been discussed in great length in the pioneering studies of Norman Whitten (especially 1976). The ethnogenesis of this latter group is somewhat different than that of the Upper Napo-area Quichua speakers. It has had a very strong and ongoing influence from Zaparoan and especially Jivaroan groups with which it interacts and, at times, absorbs (see Taylor in press).

Although the ethnonym Quijos Quichua has little local relevance today, it denotes important historical affiliations. The Quijos were a pre-Hispanic and early-colonial people of unknown linguistic affiliation; Quichua, it is known, was not their main language. The Quijos were loose-

ly organized in chiefdoms and inhabited much of the upper Napo and many of the montane valleys extending west into the Andes (Oberem 1980). The Ávila Runa, as well as many other upper Napo Runa communities are, in large part, descendents of these people.

Contact with Spaniards came quite early for the Quijos. The first expeditions of Spaniards to the region were in the late 1530s (Oberem 1980: 62). Spanish settlements were erected in the region in the mid-1550s (1980: 72).

The "city" (*ciudad*) of Ávila, founded in 1563 –approximately in the present-day location of the Runa village of the same name– was one of these European settlements (1980: 78). Through a system known as *encomienda* –by means of which Indians were placed in the charge of Spaniards in order to provide tribute and receive religious instruction– Spaniards drew on the labor of the native chiefdoms surrounding Ávila. The *encomiendas* in Ávila were never profitable. In addition, a major regional uprising completely but temporarily destroyed Ávila in 1578. By the 17$^{th}$ century the Quijos region was considered poor and barely worthy of attention. By the early 18$^{th}$ century Spaniards no longer inhabited Spanish cities such as Ávila and Archidona and these become primarily centers of native settlement –serving as ecclesiastical parish seats and government administrative centers. It is in this period, probably, that Quichua completely replaced the native maternal tongues in this region.

In the late colonial period the native inhabitants were forced to pay tribute directly to the government. This requirement was only abolished in the 1840s and was replaced with a system of forced sales that would often enrich the republican governors that were appointed to the region. This, in turn, was replaced by a system of debt-peonage beginning in the 1920s, approximately. Under such a system, the Runa were forced to work off debts they incurred through the extension of commodities. Such work sometimes took the form of labor on the estates of the various white bosses (*patrones*). In Ávila, it primarily took the form of incurring debts to itinerant traders. These debts would be paid off by the exchange of local products, especially **pita** fiber (*Aechmea* sp., Bromeliaceae).

By the 1950s the hold of the *patrones* began to weaken. In the 1970s, the discovery of petroleum in the Ecuadorian Amazon, the agrarian reforms in the highlands, and the construction of roads into the region, contributed to major social and economic transformations. Colonization of the region by poor highlanders and coastal people began on a large scale. During this period, Ávila men began to work on a temporary basis as paid field hands (usually for a couple of months each year) on ranches near Coca, Archidona, and the Napo River. For a time, many even ventured to the banana plantations of coastal Ecuador where wages were somewhat higher. In the late 1980s, a road linking Tena and Coca, two important Upper Amazonian towns, was finally completed. This road –with its attendant colonization and commerce– passes through Loreto, which is approximately twenty-five kilometers by trail from the center of the Ávila community. Loreto, once an indigenous community, now became a thriving commercial and administrative center with a growing colonist population.

Although many Ávila men –especially those that were young and single– continued to work occasionally as field hands, people in Ávila began to rely at this time on cash crops as a source of income. Coffee is to this day the most important of these. This seems to be because this crop requires little attention and it thus fit well with Ávila rhythms, focused as they still are on hunting, fishing and visiting. Other important cash crops include feed corn and cacao.

***Current Orientations***

When I first visited Ávila in 1992, access to this community was by a narrow footpath and houses were dispersed throughout the forest. By 1994 a municipal tractor had plowed its way to Ávila, making this small trail into a road clearing (known as a *desbanque*). Such a clearing is still impassible to motor vehicles but it is an important preliminary step toward making a road. The effect of this widening of the trail was that inhabitants of Ávila could carry their crops on horseback to market in Loreto. Accordingly, several families purchased horses in the mid-1990s and most people no longer have to carry fifty kilo sacks (*quintales*) of coffee on their backs to Loreto.

Road building is one of the major promises that politicians use to get elected. For this reason, before every election, incumbents advance the road head (*punta*) by several hundred meters. By the time I left Ávila in 2000, the road head had advanced to the border of Ávila territory, approximately eighteen kilometers by trail to the Ávila Viejo center.

The *desbanque* now traverses a major portion of Ávila territory. One effect of this is that people are now moving their houses to be alongside the trail, whereas before they lived in a much more dispersed fashion. There is, however, still one sizeable part of the village that is not traversed by the *desbanque* and houses continue to be dispersed.

There are approximately 350 people living today in Ávila Viejo. They have a legal title of 6000 hectares of land which is communally owned (see map); community members (known as *socios*) cannot sell this land and they are assigned plots –for the most part corresponding to traditional settlement s– by a communally-elected governing body.

Colonists surround the community on several sides. In an arc from the northeast to the southeast –with the Suno River as the border– there are colonist ranches and plantations. Most of these inhabitants are poor mestizos from the coast. To the south, most of the colonists are Runa from Archidona. West and north of Ávila there are over 100,000 hectares of forest reserve and natural parks, parts of which are used as hunting territory by the Ávila Runa.

There have been flows of people out of Ávila Viejo for several generations. This community's official name, "old Ávila," reflects the fact that this area has been an important source for migrations elsewhere. At the turn of the 20$^{th}$ century, it was one of the most densely populated of Runa communities in the Upper Napo region. However, during the Rubber Boom (roughly between 1875 and 1920), traders entered and forcibly enslaved many Ávila Runa to tap rubber in the forests near the Napo River in what is now Peru; Ávila, as a consequence, became severely depopulated. It is important to note that the Ávila Runa are not descendents of slaves. Most of those enslaved never returned to Ávila and today in the Peruvian Amazon there are many Runa settlements of people whose ancestors were originally from Ávila (see Mercier 1979).

Following the Rubber Boom, the Ávila population recovered and overpopulation was stemmed –this time through internal mechanisms– as many Ávila Runa began to migrate down the Chaca Yacu and Huataracu rivers in search of better fishing. Thirty or forty years ago the villages Ishpano (also Hishpano) and Huiruno were founded in these regions. As it turns out, these settlements are now much closer to the Tena-Coca road that was completed in the late 1980s –some of the inhabitants even live on the roadside itself– and accordingly, these people today are much more integrated into the national economy than those that remained in Ávila.

Ávila today is divided in two subcenters (*subcentros*) –each with its own one-room grade school and communal meeting house. These *subcentros* are Ávila proper, where I conducted most of my fieldwork, and Calmitu Yacu, to the east. In many ways, there is little difference between these two parts of Ávila; the settlement of people is continuous and no strict territorial division exists between the two. As I have already mentioned, they share the same communal land title. Furthermore, the two groups are very closely intermeshed through kin ties.

There is, however, a subtle but important difference. Calmitu Yacu was founded in the 1980s by a group of Ávila Runa that wanted to move closer to Loreto and its mission center and incipient commerce. Encouraged by the parish priest, their goal was to resettle all of Ávila in this location. Those who live in Ávila proper today –about half the community– made a conscious decision that they did not want to move closer to Loreto. Those who moved to Calmitu Yacu, by contrast, tend to be more oriented to the outside and more integrated into the market economy. One man in Calmitu Yacu has a chainsaw and a house with a cement foundation. One or two people own a head of cattle. Several also have corrugated metal roofs on their houses. By contrast, in Ávila proper, all houses have thatch roofs and chain saws and cattle do not yet exist. Another indicator of the different ways in which people in these two parts of Ávila look to the outside is that those in Ávila proper elected to have their school bilingual: classes are taught in Quichua and Spanish, the curriculum is designed in some respects using indigenous concepts, and teachers are lowland Runa. By contrast, those in Calmitu chose for their children's school the Spanish-only curriculum preferred by colonists.

Of all the Runa communities of the Upper Napo, Ávila proper is probably the least integrated with the national cash economy (see also Wray et al. 1996). Cash, however is nevertheless essential to the Ávila Runa. The following items are indispensable: axes, machetes, knives, pots, bowls, and spoons, guns and ammunition, nylon fiber, fishing line and hooks, kerosene or diesel for wick lanterns, clothing, rubber boots, blankets, laundry soap, and salt. Another item that is almost always purchased when people go to Loreto is contraband cane liquor (*trago*, **cachihua**). In addition people may buy batteries for a flashlight or radio, remedies (for themselves and for their horses if they have them), and they will usually buy a small amount of food that may last for a couple of meals: a can of sardines, a pound of rice, or a few pieces of bread for the kids. People will go to market in Loreto approximately once a month. Despite these important links to the outside, in Ávila almost all food is still grown, gathered, hunted, or fished.

***The Environment***

Ávila is located in the low foothills of Sumaco, the near-perfect sugar cone volcano to the west (Loreto County, Province of Orellana, 77˚25'W; 0˚38'S, see map). Their land ranges in elevation, from about 500 to 800 meters above sea level. The cool climate that this elevation brings has kept this region for the most part free of malaria and some other tropical illnesses such as leishmaniasis and yellow fever. Evenings are cool and the heat of the day is not particularly oppressive. The region gets over 4000 mm of rain per year (see Irvine 1987: 74). There is no true dry season although locals recognize August as well as January and February as being much drier months (see also ibid.).

The major rivers in Ávila, the Suno, the Chaca Yacu[2], and the Achi Yacu (also Hacha Yacu) are found in deep ravines, they are fast flowing and can flash flood without warning. These are not navigable and, although fishing is extremely important, these do not have the fish biomass or diversity of the more placid rivers at lower elevations to the east.

Ávila has been settled continuously since the 16$^{th}$ century. Even those forests in its envi-

rons that are quite mature have been greatly affected at one point or another (see Balée 1989). Evidence of habitation abounds. For example, **huayusa** (*Ilex guayusa*, Aquifoliaceae), the tea-like stimulant is almost always present as a small treelet in house gardens. Not far from the Ávila center, enormous specimens of these –possibly several hundred years old– can be found planted in rows in what otherwise appears to be primary forest.

Just west of the communal center the landscape changes and the rolling foothills give way to much steeper slopes and ridges with elevations as high as 1200-1400 meters. With the exception of the space around some hunting camps, the forests in this area have not been cut. Although many kinds of game such as the large caviomorph rodents, some fowl, deer, and collared peccary are found in the forests around Ávila, this more mountainous region is considered to have much more game. Indeed, certain prized game animals, such as the woolly monkey, are only found there.

***Settlement and Social Organization***

The Ávila Runa in many ways are an example of what Anne-Christine Taylor calls, "Christianized Indians." As opposed to "traditional" groups in Ecuador such as the Jivaroans and the Huaorani, whose social organization is still characterized by cross-cousin marriages and ephemeral war chieftancies, among the Runa, "political and ritual organization has been greatly influenced by civil or ecclesiastical colonial models" (1999:195). Kinship is largely Hispanic-Andean. As in the Andes, fictive kin ties (*compadrazgo*) are also important. In Ávila, residence is patrilocal, usually until the birth of the second child, when the young couple will then establish its own household.

Until approximately the 1960s or 1970s individual families would have one or more house sites dispersed in what is now Ávila territory and also beyond in what is now land owned by colonists. These were known as **tambu huasi**. Families would shuttle between these, staying at each for weeks or months at a time. For the major Catholic holidays, which were celebrated with

elaborate feasts until the 1970s, they would come to more centrally located houses. Often several families (apparently not necessarily related through kin ties) would live in such houses –almost like a long house– sharing game meat and manioc beer. Today these multi-family houses no longer exist. Several families in Ávila, however, continue to maintain secondary houses. Some of these are little more than hunting and fishing camps; others are somewhat more established and can include fairly extensive gardens.

Houses vary in Ávila according to the interests and resources of their owners. All houses have palm thatch roofs and bamboo walls. An ideal house is very spacious and able to accommodate many visitors and has an elevated split palm floor. It should be located on a small hilltop to ensure drainage and be close to a stream for drinking water and washing. Constructing such a house requires a large amount of resources; a family must be able to organize a labor party through the system of reciprocal obligations known as a **minga**. This requires abundant game meat and drink. Building a house also requires a cash expense that is not trivial by local standards. Items that need to be purchased include ammunition to hunt game, cane liquor, and nails. Houses generally last only six or seven years and not everyone is willing or able to build such a large structure every time a new house is needed. Accordingly, many people will live in much smaller houses, often with earthen floors.

***Lifeways***

A typical day in Ávila often begins in the predawn hours –around three in the morning when women distribute the tea-like stimulant **huayusa**. Some people will stay in bed, especially if they are sick. Others will go to warm themselves by the fire. Men may weave fishnets or baskets whereas women often weave net carrying bags (**shigra**) during these early hours. Alternatively, women may gather around in a circle to peel manioc (**lumu**, *Manihot esculenta*, Euphorbiaceae) or **chunda** palm fruits (*Bactris gasipaes*, Arecaceae), both of which are used to make beer. Shortly before dawn men may go off to hunt. Breakfast, often consisting of steamed

plantains (**palanda**, *Musa* sp. Musaceae) piled high on a leaf and boiled fish or meat in a salty broth, is usually served around sunrise or shortly after. If there is no fish or game, a broth made from hot peppers is served. This is often followed by a large bowl of manioc beer, the first of many to be served throughout the day.

Women will spend a large portion of the day working in their gardens. People in Ávila practice swidden agriculture. Men may help them, especially in the heavier tasks such as felling trees. Generally people do not eat any lunch, although manioc beer is consumed several times a day. Men often go out hunting again in the afternoon. The second meal is served in the late afternoon. People will usually be sleeping by seven or seven thirty in the evening.

Such a typical day is often punctuated by other kinds of days. Some forest activities, such as long hunts, may take a man away from home for the entire day. Alternatively, small family fish poisoning expeditions or larger communal ones may also take people away from home for the entire day. Sometimes families will camp out in the forest to hunt or fish in this manner.

However, social visits are what most often punctuate the typical daily rhythm that I have described. These include a lot of beer drinking. Although women spend most of their time in the gardens cultivating manioc, very little of this is ever eaten. Instead, almost all of it is used to make beer (**asua**). In fact, women spend most of their time either growing manioc or making it into beer.

In comparison to other Upper Amazonian communities, Ávila is distinctive in that almost all households keep a continuous supply on hand of a fungus beer, known as **ali asua** (the good or proper beer), which requires a large amount of labor to prepare. In other communities, by contrast, this kind of beer is usually reserved only for special celebrations.[3] This beer, and the more concentrated extract **vinillu** made from it, play very important roles in Ávila social life; families strive always to have a large batch on hand so that they will never be without it if visitors should come by. People will often invite guests, say a *compadre* or a son-in-law, to drink beer. Alternatively, people coming back from market in Loreto or just passing through may pay a visit.

Communal meetings are often moments of extreme sociability in which people end up at other's houses to drink. There is also one family in Ávila that sells cane liquor and visitors will often bring some of this to the houses of their hosts.

Drinking parties are a central part of Runa life. They can last for several days and are held quite frequently. During these periods many of the daily rounds of activities are disrupted. Families do not prepare **huayusa** tea but instead sleep through the entire night. Men generally do not hunt either. Drinking is considered a normal part of everyday life in Ávila. Except regarding people that regularly become excessively violent, this activity is not frowned upon in Ávila.

In this dissertation I write almost exclusively about people's understandings of and interactions with the forest. However, readers of the chapters that follow should keep in mind that such activities and the conversations about them that I document are only one part of daily life in Ávila. Everyday interests also include such topics as the current selling price of coffee beans in Loreto or the health of a neighbor's horse. Ávila nature knowing is one element of Ávila lifeways and it is not always seamlessly integrated with many of the other social, material, and conversational flows in which the Runa are immersed.

It is my contention that the aesthetic orientations, detailed ecological knowledge, and complex cosmology that I describe grow out of specific environmental and economic circumstances that lead people to rely on the forest for much of their sustenance. I argue that these understandings and orientations are motivated –although not determined– by a subsistence way of life and the forms of interaction with the forest that this way of life requires. Because this system is driven by the challenges posed by engaging with a complex environment, I believe that many of the orientations I describe will no longer be important once people cease to rely on the forest for subsistence. I do not wish to imply that the Runa lifeways I describe are timeless. They are not. However, what has *not* changed, is the fact that people in Ávila today are still dependent on the forest for much of their food.

The changes that the Runa may face in coming years pale in comparison to the decima-

tion caused by Spanish contact, disease, and conquest, or, more recently, the Rubber Boom. Yet, as devastating as these events certainly were, people still had to hunt and fish in order to survive. The changes that the Runa face today, although probably much less dramatic and not necessarily deleterious, could well have serious repercussions on the understandings and orientations I study in this dissertation –based as they are on intimate engagements with the forest.

Despite tremendous political and economic instability, Ecuador is steadily growing in prosperity. Furthermore, the population, especially in the Upper Amazon, is increasing rapidly. Colonists are already hemming in the Ávila Runa from most sides and when a road finally comes in to Ávila there will be many more economic opportunities than currently available. When this happens, hunting and fishing –which already are exhibiting diminishing yields– may cease to be a regular means of subsistence. There are other, more ominous scenarios as well. The civil war in nearby Colombia is having its repercussions across the border in Ecuadorian Amazonia. FARC guerrillas (referred to as **guili guili** in Ávila, from the Spanish, *guerrilla*) are already beginning to quietly take up residence in safe houses in Loreto and if the war comes to Ecuador, many people in the region may be forced to flee.

In short, this dissertation is not about the Runa people in an abstract or holistic sense. It is about their nature knowing in the context of specific ecological engagements, and it is only meaningful as an inquiry in such contexts. Once such engagements no longer exist, the forms of knowing related to them will also disappear.

**The Study Site in Regional Context**

Ávila proper is in many ways atypical of contemporary Upper Napo Runa communities. Along with San José de Payamino it is one of the communities in the region least dependent on the outside for its economic sustenance. If my intention were to trace the full impact of the wider world on a local indigenous community, this may not be the best place to see it. Nor is it my goal to capture a "pristine" Amazonian way of life, uncontaminated by outside influences. If this were

my intention Ávila certainly would be the wrong place to look for it; as I demonstrate throughout the dissertation, the wider world continuously makes its way into the local. As I discuss in Chapter Six, what is unique about Ávila vis-à-vis other Upper Napo communities is the conjuncture of two factors: 1) hunting and fishing are still mainstays of life, and 2) contact with outsiders has been continuous and intense but also sporadic and buffered. This conjuncture provides an interesting opportunity to understand forest experience and how it relates to ecological cosmology within a context of change. The fact that hunting, fishing, and subsistence agriculture is still very important in Ávila makes activities associated with it easy to observe. This continuing importance also means that it is still an important daily topic of conversation. As I indicate in Chapter Six, more isolated communities would not have such an intense intermixing of the global and the local in the realm of ecological understanding and communities that live more squarely within the market economy are less intimately engaged with the forest.

**Argumentation**

The data I use to support my argument take, for the most part, the form of anecdote. They include stories, experiences, observations, and portions of conversations that I feel can reveal something of the texture of life in Ávila. My role is one of interpretation –of making sense of these anecdotes. For the most part, the Ávila Runa, like the Achuar (Taylor 1996), are not particularly interested in meta-commentaries of the form, "this is how we do *x*" or "this is what *y* means." My interest in those kinds of questions creates a certain conflict of interest between being faithful to the immediacy of Runa experience and stepping back to create a broader vision –one that the Runa themselves do not feel the need to elaborate.

This conflict creates certain problems of verifiability. Questions such as "do you do *a* for *b* reason?" or "or does *c* mean *d*?" generally make little sense to people in Ávila. Furthermore, as I discuss in Chapters One and Two, I am trying to distance myself from a view of culture that seeks to equate knowledge with a classificatory map of native terms. That is, the elicitation of a

native term does not necessarily imply the existence of an important local category. Similarly, the absence of such a term does not imply the absence of a concept. My solution to this problem of verification is simply to make as transparent as possible how it is that I arrive at my claims of interpretation so that the reader can consider this in her judgement of whether or not my interpretation is in fact convincing.

Another important issue regarding the use of anecdote is sample size. Are generalized conclusions based on a few anecdotes justifiable? This question is also complicated by the fact that the transcription, translation, and exegesis of reasonably sized portions of spontaneous speech requires a large amount of space. In many cases an anecdote that I cite is one instance of many such anecdotes that I could bring forth to document my claim. This is true, for example, of my argument in the first chapter. Because of my focus on an instance of recreated experience and its interpretation, I analyze only one narrative, but the points I make could be supported by many more such examples.

Other anecdotes are revealing precisely because they are unique. This is the case regarding the events and conversations surrounding the killing of a pack of dogs by a jaguar, which I analyze in some detail in Chapters Three, Four, Five, and elsewhere. I return repeatedly to this event for two reasons. First, the traumatic nature of it and the importance ascribed to it permitted me to see how people reacted under extreme circumstances; this event both crystallized and shattered certain local assumptions and was very revealing for this reason. Second, I was able to record people's understandings of the event as these developed over several days and I was also able to participate in the search in the forest for the bodies of the dogs. I have extensive recordings of conversations about this event spanning almost three days. This provides a unique opportunity to get a sense of how people try to understand forest experiences and how their interpretations change over time as different kinds of evidence come to the surface. Only an in-depth analysis of a specific event can get at this.

Where possible and feasible in the dissertation, I try to draw on anecdotes from a variety

of sources. For example, my discussion of Runa notions of personal accountability of misfortune (Chapter Six) begins with trying to understand a simple problem: why do the Runa accept the Christian concept of Heaven and reject that of Hell? And it leads me to formulate an answer based on anecdotes from a range of ethnographic cases. Some of these cases involve multiple local interpretations of events. These provide a good opportunity to understand the interplay between diverging opinions and consensus in Ávila.

Consensus is indeed a major issue. There are people that will view any claims of the form, "the Runa feel that…" with suspicion. Society, they will say, is the product of continuous conflict and disagreement and its mediation. A priori assumptions either way –towards consensus or conflict– of course are problematic. In this dissertation when I make such claims about "Runa" understandings, I do so because I feel that, in that specific context, such generalizations are indeed in concordance with my sense that there is a general consensus in Ávila regarding the matter at hand.

The true test of the validity of my interpretations lies in their generative power. Do they allow us to understand ethnographic situations that are beyond the cases that I treat? To this end, another source of tension becomes evident in my work. On the one hand I am trying to give a sense of the texture of Ávila lifeways. On the other hand, I am trying to provide a more abstract framework that can explain more broadly the forms that Runa lifeways take.

In some ways this is analogous to the problem of language acquisition. Like the analytical framework I establish, a pedagogical grammar is in some sense "artificial" in that it does not replicate in its form the process by which native speakers come to learn their language. However, a non-native speaker can use it to learn the language. The end result will be that that an outsider can learn to speak the same language, even if the path she took to learn it was different from that which locals take.

This dissertation is intermediate in scope between attempting to elucidate a "natural grammar" and constructing an artificial one. On the one hand, I want to point to how an excessive search for structure tends to ignore the local experience of things. On the other, I want to estab-

lish some structure that will permit an outsider to have a sense of the more fundamental aesthetic orientations that inform Runa forms of engagement. For example, a reader of Chapter Three may learn how to tell a joke that will make people laugh in Ávila. The process that reader took may well be artificial but the laughs it can generate are not.

**Research Methods**

I spent almost four years (from 1996 to 2000) in Ecuador conducting dissertation research. Roughly half of this time was actually spent in Ávila. The rest of the time I spent in Quito, analyzing data, transcribing recordings, and processing biological collections.

When in Ávila I would only stay with families, sharing a space with them in their one-room houses; this meant that practically every moment in the village was a field moment. I almost exclusively spoke Quichua in Ávila. Most people there only know rudimentary Spanish and feel much more comfortable speaking Quichua in the village setting.

Studies of cosmology have several potential pitfalls. One of these is that a researcher can rely excessively on structured interviews to obtain information. By doing so, he or she may lose sight of the distinction between an idealized meta-model –often a dialogical construction between informant and ethnographer– and how people live in and experience the world. For this reason, I was extremely wary of structured interviews, especially on subjects such as cosmology, and generally avoided them for the first year or so of fieldwork.

During that first year or so, apart from participant observation (participating in drinking parties, communal labor, hunting and fishing trips, etc.), I focused primarily on collecting specimens of organisms (something that I continued to do throughout the fieldwork period). This allowed me to learn the ethnobiological context –often taken for granted by locals– that would permit me to comprehend what people said about the forest. It also allowed me to spend considerable periods of time in the forest with the Ávila Runa.

In the village and forests I collected over 1100 specimens of plants (see Appendix One)

as well as twenty-four specimens of fungi (see Appendix Two). These are housed at the Herbario Nacional, Quito with duplicates at the Missouri Botanical Garden. I also collected over 400 specimens of invertebrates (see Appendix Three), over ninety specimens of herpetofauna (reptiles and amphibians, Appendix Four). I also collected almost sixty specimens of mammals (all of these are housed in the zoological museum of Universidad Católica, Quito, see Appendix Six). My thirty-one collections of fish are housed in the zoological museum of the Escuela Politécnica Nacional, Quito (see Appendix Five). Making specimens of birds is very difficult –requiring the complex preparation of skins. Therefore, I decided instead to document local avian faunal knowledge by making close up photographs (using a macro lens) of hunted specimens and particularly through interviews using an illustrated field manual (Hilty and Brown 1986) and commercially available recordings of calls (English and Parker 1992; Moore 1993, 1994, 1996, 1997; Moore and Lysinger 1997).

Throughout fieldwork I also made tape recordings of spontaneous conversations about forest experiences. For this I used a digital tape recorder and a high quality mini-shotgun microphone. I also analyzed recordings and transcriptions in the field with locals.

**Orthography and Naming**

In this dissertation I use **bold** font for Quichua, primarily in order to distinguish it from Latin taxonomic terminology for which I use *italics*. In general I adopt Orr and Wrisley's (1981: 154) orthography which is based on Spanish. My logic for doing this is that this is the system that Quichua speakers that learn how to read Spanish would find the easiest to comprehend. In addition I use an apostrophe (**'**) to indicate glottal stops and a superscript h (**$^{h}$**) to indicate aspiration. Words are to be stressed on the penultimate syllable unless indicated by an accent. The plural marker in Quichua is **–guna**. However, for reasons of clarity, I usually do not include the plural marker in Quichua words even in contexts in which I use the term in its plural form in English. The plural marker is less obligatory in Ávila Quichua than it is in English; Quichua-speakers

often do not mark words as plural even though they are thinking of them as such. I use the plural marker to indicate words that the Runa almost exclusively use in plural form. For example, the forest game masters are almost always referred to as the **sachaguna** (the forest ones) and rarely individually as a **sacha runa** (forest man). Similarly, for clarity, I generally use the infinitive form of verbs (verb root + **-na**) even when in the English I use the term in a different tense. I generally use Latin nomenclature (usually genus and species followed by family) for all organisms except birds and mammals. For these latter two groups I usually use English names because this is the way biologists generally refer to these.

# Chapter One
# The Aesthetic of the Immediate

## Introduction

"How do people ordinarily come to understand the natural world?" This is the fundamental question that ethnobiologists attempt to address (Medin and Atran 1999: 1). In this chapter, I develop an alternative approach to this question that I hope can complement the one usually taken in ethnobiology. Specifically, I am interested in how the Runa use poetic language to make sense of nature. This exploration requires a different approach to the relationship between language and knowledge than that which has usually been taken by both ethnobiologists and their critics.

An important tenet in ethnobiology is the idea that how things are named, and how those named things are then classified, are activities that are central to how people come to know nature. Studying taxonomic classifications, however, may not be the best way to get at local biological knowledge. Ellen (1999), for example, has suggested that Southeast Asian rain forest hunter-gatherers know much more about nature than their classifications reflect. He grants that agriculturalists of the region have "broader" systems of classification than hunter-gatherers. That is, their systems of naming organisms partition the environment more extensively. Nevertheless, he notes that hunter-gatherers, who are involved more intensively with forest environments through extractive activities, have greater in-depth knowledge of local natural history and ecology. The level of complexity of ethnobiological classification, then, is not always a good indicator of the depth of local biological knowledge.

Bloch (1991) also questions the role that language plays in the organization of the knowledge needed to develop expert skills. He reviews literature in cognitive psychology on concept formation to argue that most knowledge is made up of implicit, non-linguistic networks of meanings that are formed experientially (1991: 186). When this knowledge is "rendered into language" (1991: 186), he observes, its character changes fundamentally. On this view, if knowl-

edge is primarily non-linguistic, what relevance does ethnobiological nomenclature and classification have to knowing nature?

Bloch's critiques of the relationship of language to knowledge notwithstanding, he shares with the ethnobiologists the same view of what culture is, and therefore, what anthropology, as a discipline, should investigate. Ethnobiology adopts ethnoscience's definition of culture as, "whatever it is one has to know or believe in order to operate in a manner acceptable to its members" (Goodenough 1957: 167 quoted in Atran 1993: 49). Bloch's definition is almost identical; culture is, "that which needs to be known in order to operate reasonably effectively in a specific human environment" (Bloch 1991: 183).

These definitions lead to particular avenues of research at the expense of others. This is because they delimit culture very broadly. In attempting to account for all the knowledge necessary for locals to function in their society, these definitions fail to distinguish between those aspects of knowledge that locals already possess (consciously or unconsciously) and those more specialized elements that locals deem necessary and interesting to share.

For the most part, the goal of ethnobiology is not to understand particular cultures. Rather, it sees the elicitation of cultural elements through linguistic terms as a way to get at more fundamental cognitive processes. In this sense, much research in ethnobiology is more aligned with cognitive science than with cultural anthropology (Colby 1996).

But it is precisely from a cognitive perspective that this "division of labor" between meaning –that which is considered important to locals– and knowledge –the essential blueprints for action in the world– is untenable. The kinds of approaches that Bloch and many ethnobiologists develop ignore the irreducibly *conscious* quality of knowledge. Consciousness has traditionally been eschewed as a topic of scientific study because of its subjective nature (Atran 1993: 68). The only way that consciousness can be verified is through a Self that experiences and that Self's attempts to communicate that experience with others (Cartmill 2000). However, there is a growing recognition by neurobiologists that knowing about the world perforce involves some sort of

self-awareness of experience –in a word, consciousness– and that this quality must be integrated into models of how the mind comes to know things (Damasio 1999).

My claim that knowledge has a conscious quality to it and that consciousness, in turn, is subjective and can only be shared through communication, leads me to an approach to language that is very different from that proposed by ethnobiologists or by Bloch. For this reason, I try to understand how the Runa come to know nature by examining how they talk spontaneously, among themselves, about their experiences of the natural world. This approach is advantageous because they, and not the anthropologist, establish the "basic units of analysis" (Bruner 1986: 9). In other words, more structured approaches to ethnobiological knowledge can distort our understandings of how knowledge is circulated and employed and –perhaps more importantly– what it is that locals deem interesting to know in the first place.

This approach suggests that the language that the Runa use to know nature exhibits neither the "sentential-logic" (Bloch 1991: 183) that causes Bloch to see language as so alien to understanding, nor the preoccupation with taxonomy that constitutes the traditional focus of ethnobiological approaches.

The process of knowing nature, I argue, can best be seen in spontaneous contexts. Structured approaches to knowledge –through the elicitation of taxonomies, or interviews—are an integral part of ethnographic research on ecological knowledge but should be complemented with the documentation of contextualized practices. This is why I try to get at local understandings of nature by focusing on specific utterances made by individuals in unprompted contexts. My presence (along with my tape recorder) certainly had some influence on the form these conversations took. Nevertheless, these recordings capture something of the everyday exchange of natural history stories in Ávila in a way that elicited narrative does not. For this reason, they can help reveal not only *what* people know but also *how* they go about knowing it.

Because of my hesitance to treat nature knowledge *a priori* as a system, the starting point from which I choose to exam it is different. Instead of trying to discern a system of knowledge,

I am, for the present, interested in specific instances of knowing. The contrast between the implications of using the noun "knowledge" on the one hand and the verb "knowing," on the other, are important. Knowing is a lived process. It is in this regard, that Michael Jackson quotes Heidegger's remark that, "an experientially authentic language would make verbs its grammatical subjects" (Jackson 1996: 3).

In what contexts does knowing emerge? And, what shape does that knowing take? These are questions that, I believe, must be addressed prior to any treatment of what knowledge is.

**Poetics and Nature**

Following Paul Friedrich, my approach to the question of how people come to know nature begins with the imagination. Imagination refers to, "the processes by which individuals integrate knowledge, perceptions, and emotions in some creative way which draws on their energies in order that they may enter into new mental states or new relations with their milieu" (Friedrich 1986: 18). Such an approach focuses on individuals, their ways of knowing and being in the world, and how they relate to a variety of "givens" without invoking structural approaches that reduce people to automatons, no matter how much agency is fed back into the equation (Friedrich 1979: 446). In this regard, Jackson makes a similar critique of approaches in social theory that downplay the role of the person:

> No matter what significance we attach to discourse or culture, the phenomenal world of human consciousness and activity is never reducible to that which allegedly determines the condition of its possibility. Even if one tried to expunge the subject from one's discourse, it is one's own subjectivity which accomplishes the expulsion. Every argument for the death of a subject is authored by a human subject. By dismissing the subject, Bourdieu and Foucault would deprive us of the very site where life is lived, meanings are made, will is exercised, reflection takes place, consciousness finds expression, determinations take effect, and habits are broken (Jackson 1996: 22).

The focus on the individual imagination as the locus for creation and recreation, as indi-

cated by the statements of the aforementioned authors, is commensurate with psychological anthropology's insistence that any treatment of knowledge must also include a treatment of the individual minds in which it is produced (Hirschfeld 2000).

One important venue through which to get a sense of how people in Ávila come to understand nature is by examining the stories they tell about the forest. In these, they combine their impressions of forest sounds, images, and occurrences to create exuberant performances that simulate (Nuckolls 1996) their forest experiences.

People often recount these in the early stages of the regular drinking parties –where neighbors, *compadres*, and relatives gather. In later stages, when people have already been drinking for some time, subtleties such as precise words and the images they conjure become less important and, accordingly, these sorts of stories become less important. Another more intimate context in which stories of experience in nature are told is during **huayusa uras**. This is a time –anywhere between midnight and four in the morning– when the Runa wake to drink the caffeine-rich decoction made from the leaves of the **huayusa** tree (*Ilex guayusa*, Aquifoliaceae). Stories of forest experiences can also be told in the late afternoon, after a meal, for example.

These accounts, performed by both men and women, can be about a variety of subjects. For example, I have recordings that describe in minute detail a young woman's observation of a foraging buck, doe, and fawn (see Chapters Five and Seven); how a man was attacked by a giant anteater (see Chapter Six); how the **puca ñahui** fish (*Crenicichla* sp., Cichlidae) taps at submerged palm logs in search of grubs; how it was discovered that a mountain lion (**puca puma**) covered with leaves a part of the carcass of a deer it had killed in order to preserve it (a related account is analyzed in Chapter Nine); and, of course, a very large number of accounts of both successful and unsuccessful hunts.

A teenager named Maxi performed the story I will analyze in this chapter. This boy was not ashamed of his novice status as a hunter –at least not around his age mate Luis, at whose house I was staying and where Maxi and his parents were attending a drinking party that was well

into its second evening. Maxi had been hunting on his own with a shotgun for only a short time when I had first met him a few months back. Luis, Maxi, and I were alone (adolescents in Ávila rebel against their parents by *not* drinking, and, sensibly, they often try to stay clear of the sometimes violent drinking scene). We were in Luis' cramped bedroom, the likes of which teenage boys –trying to distance themselves from their parents and interested in safeguarding their first possessions accumulated with wages earned as field hands– sometimes erect.[4] Here, Maxi began talking to Luis about some of his recent attempts at hunting.

What Maxi told was riveting and hilarious. It was an account of a series of experiences that included precise observations of nature. It also included many candid admissions of some of the embarrassing blunders of a novice. For example, he told Luis how he once fired on a rat instead of the agouchy (**papali**, a hare-sized rodent) he had actually heard, how he killed an agouti (**sicu**, a somewhat larger edible rodent) that was so badly infected with botflies that it was inedible. In the case of the story I analyze, he admitted how he became so frightened of a herd of collared peccaries (**sahinu**, **lumu cuchi**, a kind of wild pig) that he climbed a tree; as opposed to the white-lipped peccary, this species is not known to attack people and Maxi clearly over-reacted. In addition, in this same portion of the narrative, he told of how he naïvely thought that he had mortally wounded the peccary that, in fact, was able to run off and escape him. These blunders prompted Maxi to drop his voice to a whisper on several occasions; at one point, he confided that he was terrified that his father –a sometimes confrontational man whose powerful voice can often be heard on the recording booming in the background– might discover some of these foolish mistakes. Despite these admissions, however, Maxi's recounting mainly constituted a concerted attempt to make creative use of language to transmit personal forest experience to others. As such, the kind of talking that Maxi was engaging in is an important element of Runa ways of knowing nature.

In his relationship to what he says about the forest Maxi is a lot of things: he is a novice, he is self-deprecating, and he is very funny. Most important, however, is that he is a poet. Before

turning specifically to his words in order to try to understand what and how they mean, I want to examine this claim. By focusing on Maxi as a poet, I want to establish a frame for looking at his and other people's ways of knowing nature in Ávila.

Poetic language is a particularly intense and highly charged connection through which language and culture influence the imagination, and the imagination of the individual, in turn, affects language and culture (Friedrich 1979: 493). It is a medium in which culture and language matter more –they determine more in a Whorfian sense– but it is also, ironically, a medium in which poets can significantly undermine those determinacies. Through creative speech, individuals tap into the, "novel, primordial, and chaotic" (Friedrich 1986: 22). Meaning emerges by means of a mastery of poetic form, but the creative use of these forms also brings forth new meaning in unpredictable ways.

Speaking about nature in Ávila often occurs in situations in which heightened attention is given to words. When Maxi tells Luis about his experiences in the forest he uses various techniques to signal that Luis should pay added attention to what he is saying. Bauman and Briggs (1990) refer to this context in which language becomes poetic as performative. They define performance as a

> specially marked, artful way of speaking that sets up or represents a special interpretive frame within which the act of speaking is to be understood. Performance puts the act of speaking on display –objectifies it, lifts it to a degree from its interactional setting and opens it to scrutiny by an audience (1990: 73).

According to this view, the characteristic that provides for a cross-cultural definition of verbal art is not so much the structural or stylistic attributes of poetic language (e.g., rhyme) but, "how it is actually delivered in the uttering" (Hanks 1996: 190).

All language is potentially poetic. All people are poets too. Performance is the context in which these potentialities are activated and made salient. Talk becomes poetry when people highlight the poetic aspects inherent to language.

One extremely important aspect of poetic language is the intensification of form. That is, in poetic language the form of linguistic utterances (primarily patterns of sound) is highlighted so as to draw conscious attention to language itself as well as to the underlying message; different categories that are relatively independent in "ordinary" language, such as sound and meaning, become interrelated in poetic language (Jakobson 1960: 368).

In sum, poetics refers to a particular way of using language. Poetic language has culturally specific forms –even if these are not always as rigid as, say the metrical verse formula of a sonnet. There is, however, a great amount of individual creative innovation involved in poetic speech. All language has a poetic element. This quality is brought to the foreground through the ways in which individuals "perform" speech. A performance consists of a process by which a speaker consciously brackets off portions of speech so that listeners know to pay heightened attention to the relationships between sounds and meanings. This special relationship between language patterns –that is, its particular form– and meaning marks language, in a structural sense, as poetic in certain contexts.

In a later portion of this chapter, I suggest that poetic language should not only be seen as a style of speaking, as the authors discussed above encourage. Instead of looking at poetic language in terms of its formal qualities, it can also be defined in terms of what people hope to accomplish with it. As such, poetics can also be understood as a strategy to communicate personal experience by means of elicitation. It is my claim that poetic language –understood both as a way of connecting form with meaning, as well as a way to create intersubjectivity through elicitation– is central to how people make sense of nature in Ávila.

The way in which the Runa posit the connection between language and the world –and poetic language is intimately involved in this effort– has, in addition, important theoretical implications for ecological anthropology and this will be explored in the final section of this chapter.

I will examine the role of poetic language in nature knowing by analyzing one portion of the conversation Maxi had with Luis that evening that refers to hunting collared peccaries. I will

present the entire portion before analyzing it piece by piece. Before doing so, however, a clarification regarding my transcriptions and translations is in order.

After isolating those portions of my recording that I deemed most interesting, I transcribed them. I then analyzed these transcriptions, along with the original recordings, with people in Ávila. In general, I have borrowed from Dennis Tedlock (1983: 20) in developing a set of conventions to transcribe and translate these conversations. Following Tedlock, my goal is to produce a, "performable translation" (1983: 13) of the spoken passages I analyze. That is, the conventions I use, coupled with the notes I include with the transcription and translation, are part of an attempt to give the reader a sense of how such a performance might sound in English as well as how it might have sounded in Quichua. This attempt is important because of my contention that the meanings of these stories lie in the performance of their sounds and gestures.

Throughout the transcription and translation (and those that follow in subsequent chapters) speakers are identified by first and last name initials in capitals. Parenthetical statements in *italics* are immediately above the line in question and refer to additional information not captured by the text: gestures, laughter, volume, intonation, etc.

Ellipses in brackets indicate that I have left out a portion of the recording.

I use quotations to indicate reported speech, or, alternatively, to indicate thoughts. Quichua-speakers often use the verb "to say" (**nina**) to indicate thoughts or desires. This indicates to me that the performative recreation of thoughts is given a separate voice (which is sometime also evident by changes in speech volume); accordingly, the use of quotations seems to be an appropriate way to capture this.

The Quichua version is in twelve point **bold font**. Line breaks indicate a short pause –usually not as long as a breath. When a listener interjects–as in the case of Luis below– the breath pauses of the primary speaker usually occur at these points. Longer pauses, of at least two seconds, are indicated by a dot "•." A line that is indented indicates that there is to be no pause.

The word [inaudible] in brackets indicates that the recording was not sufficiently clear to

make a reliable transcription. A question mark in parenthesis –(?)– indicates that I am unsure of the accuracy of my transcription.

Ávila speakers often suppress suffixes or other word portions. A dash ("-") indicates that word parts are missing. Stress in Quichua is usually on the penultimate syllable. In cases where this differs, stress is marked by an accent ("ˊ"). This often happens when word portions are suppressed. Under these circumstances, the stress remains as if the entire word were being pronounced.

I use an em dash ("–") to indicate where the vowels of a word have been drawn out. I use a 2-em dash ("—"), or even a 3-em dash ("——") to indicate when this extension is even longer. Such vowel lengthening is done for poetic effect and is rarely the standard way of pronouncing the word.

An apostrophe "'" indicates a glottal stop. Few words in Ávila Quichua carry a glottal stop in an obligatory fashion. Such stops are generally used for poetic effect.

My translations of these transcriptions are immediately below each Quichua line. They appear in ten point plain font. A relatively literal translation and one that captures the flow of the original performance in English are often at cross-purposes (see D. Tedlock 1983: 3-19); a translation that is faithful to native syntax and the literal meanings of individual words may accurately capture some elements that are idiosyncratic to the original language but the resulting text is often awkward. A freer translation, by contrast, can better transmit some of the flow of the original but may be less accurate. In my translations I have attempted to strike a balance between these two approaches. For example, in Quichua, verbs often occur at the ends of phrases. I sometimes place these at the beginning of the phrase in my translation if this sounds more natural in English.

In some cases, I also change verb tense. For example, much of the tense of the following narrative is in what would strictly correspond to the English present indicative (e.g., **shamuni**, I come). In my translation of the story below, I sometimes use the present progressive (e.g., I am coming, sometimes translated in Quichua as **shamujuni** or, in Ávila, in addition, as **shamurani**,

by employing the continuous infixes –**ju**- or –**ra**-, respectively). Not only does this sound more natural in English but it also more accurately captures the aspectually durative nature of the action which is evident from context but is not marked by verbal inflection (cf. Nuckolls 1996: 44).

I do not always transcribe a given word in the same way twice. The idea that a given word in a language corresponds to a specific object and that, furthermore, that word-object relation has an equivalent in another language, is a fallacy of naïve realism (see Chapter Two). Many Quichua words refer to a range of meanings that are best captured by more than one word in English. I try to give a sense of this –where I feel it is appropriate– by using different words to translate a given Quichua term or phrase if it occurs repeatedly.

Speakers consciously use glottal stops, vowel elongations, and suppressed word parts. When possible and appropriate, I try to give a sense of how these affect speech style by incorporating them in the English version.

I translate questions in Quichua with a question mark -"?". However, I do not use this sign in the original. Questions in Quichua are often marked using suffixes and the intonation pattern is often quite different from the English; a use of the question mark in the original text might be misleading and, accordingly, I avoid it.

I generally do not translate phatic interjections. The following are some that occur most frequently: **chi** or **chai** (there), **ye** or **ya**, from **yanga**, similar to "no way" in English, **hm** or **mhm**, similar to the English equivalents, and **áha** (really?).

I use brackets to add information necessary for understanding the passage that would be clear to Quichua-speaking listeners familiar with the context of the material being presented. I also use brackets to indicate some of my own commentaries (e.g., [meaning unclear]) or to unpack the meanings of terms that have no straightforward translation and are repeated in bold in the English version.

A question mark in parenthesis –(?)– indicates that I am unsure of my translation.

I have tried to make these translations as accurate as possible. In many cases my inter-

pretation of the meaning of the original has been checked in the field with Ávila Quichua speakers. But I accept that there may well be errors of interpretation.

**Hunting Peccaries**

MA: (*spoken relatively softly*)

**huasha**
then

(*the first word with rising intonation in the vowel "**i—**" and then falling intonation in the next syllable "**lla**"*)

**ali—lla shamuni**
slowly I'm coming

LA: **chai**

MA: **shamu-**
and as I came

•

(*the first word with rising intonation*)

**"pa-" yarcá-**
"wow," I thought

LA: **hm**

MA: **mhm**

•

**unailla huasha**
after a long time

LA: **chi**

- 

MA: **únaita shayani caspi siquí-**
I'm standing forever at the base of a tree

LA: **hm**

MA: **mhm**

- 

**unaita shayá-**
I'm standing forever

- 

**huasha**
and so on

- 

**únaita shayani**
I'm standing forever

LA: **hm**

MA: **mhm**

**unaita shaya-**
forever I stood

•

**caspi siquipi ña**
by the tree base, already

**shu urata shayani**
I'm standing an hour

LA: **chi**

MA: [inaudible]

LA: **hm**

MA: **shaya'–ráni shayarán-**
I'm stand'–ing and standing

LA: **mhm**

MA: **u'na—ita ña shayarcán-**
fo're—ver I stood

LA: **chai**

MA: **chaira** [inaudible]
still

LA: **hm**

MA: "**ñuca chaira masc- mascariu—sha**"
[I thought] "I'll still lo- look arou—nd a bit"

LA: **hm**

MA: **uraijurcani huaicumanta**
so I went down to the ravine

LA: **ye**

MA: **u- uraicu huasha**
after going d- down

•

(*more loudly*)

**mana quita ña**
[it] wasn't wild [i.e., it wasn't skittish like a wild animal]

**(***indicating with his head***)**

**casna shinamanda**
it was like just like from

**canba ya-**
your fa-

**cangunapa yayapa cuartu tupú'**
[the distance across] the length of your father's room

LA: **mhm**

MA: **shayá'**
it stoo'd

**shayá' -rarca**
and just sto' –od there

LA: **hm**

MA: **pa'- shayarcán-**
wow, I [too just] stood

•

(*somewhat more quietly*)

**"imana tucusha" yarcani**
"what's gonna happen to me?" I thought

LM: **hm**

•

MA: (*more loudly*)

**u'nai–ta yuyarish- shayani "mana ishtaitayasca"**
I stood there fo're–ver, thinking to myself, "it's won't allow itself to be shot" (?)

LA: **hm**

MA: **yuyarí- shayani**
I stood, thinking [like that]

LA: **hm**

MA: (*quietly*)

**ú'–nailla car-**
it was an é'–ternity

(*somewhat more loudly and with an aspiration [$^{h}$] in the first vowel signalling an intense burst of activity*)

**a$^{h}$–sh–ca**
[but then suddenly] lo–ts

(*with rising intonation*)

**shamunún**
come

LA: **ya**

MA: **mhm**

(*in rapid clipped succession*)

**huahuata nipi ichillata nipi**
young ones, small ones

**ta'**
[sound symbolic adverb, meaning unclear, possibly a reference to how the peccaries are spreading out across the landscape; cf. **tsa–** below]

LA: **hm**

MA: **pa-**
wow

**“micúngarahuanun” yarcani**
“they’re gonna eat me,” I thought

(*provoking both to laugh*)

**“micúngarahuanun” yarcá’-**
“they’re gonna to eat me,” I thought

LA: **ha**

**illapas manchachinguimanca**
[but] firing [at them] you would have scared them

MA: **mana yarcani chitac-**
that I didn’t think of

LA: **chi**

MA: (*indicating with his hands*)

**caimanda cai tupu’lla caspi ahuaman sicá’-**
say from here, that’s the size of the tree I climbed up

**sicarcá-**
and climbed

(*LA laughs a little*)

MA: **mana riparanurca**
they didn’t notice

(*said quietly*)

**cuyú' cuyú'**
when **cuyú' cuyú'** [sound symbolic adverb focusing on the sound image of a person or animal moving purposefully and by doing so unavoidably making noise]

**sicapica**
I climbed

LA: **mhm**

MA: **tamiaca tsa—**
the rain [was coming down with a] **tsa—** [sound symbolic adverb imitating how droplets of rain disperse through the air]

**chiraicu mana riparanurca**
that's why they didn't notice

LA: **chi**

MA: **sicabas**
and as I climbed

(*said with intensity and with rising intonation*)

**á'tunllatalláta siquírucu nini**
a big old rump, I tell you

LA: (*with a slight laugh*)

**áha–**

MA: **chita**
at that

(*also with intensity*)

**tya’**
**tya’** [sound symbolic adverb indicating successful firing of a shotgun]

**e—**

**e—** [imitation of sound made by peccaries when they are hit by shot]

**illaparcá-**
I fired

LA: **ye**

MA: (*with a very low pitched voice*)

**cuhuá— hua hua hua hua**
[imitation of the cries of a wounded animal]

**yacú’- yaculla**
right there in the stream

**pts’po–’u– rumagri-**[5]
with a **pts’po–’u–** [sound symbolic adverb describing how an entity penetrates and then submerges under water] it fell in

LA: **ye**
really?

MA: (*rapidly, as an aside*)

**ñuca**

and me

**upaca “huañungami” yuyani**
foolishly, “it’s gonna die,” I’m thinking

LA: (*laughing a little*)

**ahá**

MA: *(surprised)*

**chi**
when

(*with rising intonation*)

**calpagripimá**
it suddenly ran off

•

**uh'**
damn

**snta**
like that

(*with rising intonation*)

**calpasa ri–n**
running it we–nt

LA: **chai**
there

MA: (*softly*)

**chica ña "japishachu"**
then, "will I be able to catch it"?

(*more loudly*)

**mana japircani**
I didn't catch it

LA: **ha**

MA: **huashapa japits-**
later they got it

**sacha puri ru- Mayuru maucá- -nami huañugrisca ninún**
forest-walking men say it just ended up dying in Mayuru's fallow

LA: **ya**

MA: **ña ña chica ña chipamar quishpini**
so so that's how I allowed it to get away

LA: **mhm**

MA: **huash- saquircani**
after a while I abandoned [looking for it]

LA: **hm**

## Contrasts

Maxi begins by switching to a hushed tone to say

**ali—lla shamuni**
slowly I'm coming

This change in volume constitutes a "frame" that signals a break with the previous conversation and indicates to Luis that he should focus more attention to how the sounds of words mean. The performative nature of this verbal exchange is also indicated by the structure of interaction between Maxi and Luis. This is not a conversation in which two people discuss a subject back and forth. Luis' role is to be a good listener and, at times, to interject with a comment. This role establishes itself into a predictable rhythm. For example, on several occasions throughout the portion presented, Luis responds to Maxi's phrases with a phatic **hm** and Maxi only picks up his narrative again after a slight pause and his own phatic **mhm** as a response.

Maxi pronounces the word **ali—lla** quietly and carefully. He drags out the vowel "**i**" and also raises his pitch as he pronounces this vowel. The word **ali—lla**, as Maxi pronounces it, provides a sound and semantic image (*sensu* Friedrich 1979) that recreates the challenge of moving slowly, quietly, cautiously, and attentively through the forest. Forest hunting is primarily the art of "watching vigilantly," which is the literal meaning of **chapana** the most common Quichua gloss for this activity.[6]

After walking in this fashion, Maxi stopped by the base of a tree where he just stood

•

MA: **únaita shayani caspi siquí-**
I'm standing forever at the base of a tree

LA: **hm**

MA: **mhm**

•

**unaita shayá-**

I’m standing forever

•

**huasha**
and so on

•

**únaita shayani**
I’m standing forever

LA: **hm**

MA: **mhm**

**unaita shaya-**
forever I stand

•

**caspi siquipi ña**
by the tree base, already

**shu urata shayani**
I’m standing an hour

LA: **chi**

MA: [inaudible]

LA: **hm**

MA: **shaya'–ráni shayarán-**
I'm stand'–ing and standing

LA: **mhm**

MA: **u'na—ita ña shayarcán-**
fo're—ver I stood

Maxi uses two sound images to relate his experience of interminable waiting. Multiple repetitions (nine times in half a minute) of the verb "to stand" (**shayana**) convey monotony. He also draws out the final vowels in the word "forever" (**unaita**, pronounced by Maxi as **u'na—ita**) to create a parallel between the lengthened sounds and the duration of his wait. In addition, he speaks very slowly, taking long pauses between each phrase.

Maxi also uses a semantic image –one that is less concerned with sound to convey meaning– in order to transmit something of the state in which he found himself. The tree base is the only object he mentions in the forest. In Quichua there are two ways to refer to trees. Appropriately he uses the term **caspi**, literally "stick," rather than the other possibility –**yura**, literally, "tree." The first term refers to the object in question as an artifact. That is, as something inanimate and potentially useful. The second term –**yura**– would refer to it as a "living kind" with certain implicit associations of what it shares with other life forms. Atran (1993) has argued that classifications of things as either artifacts or living kinds refer to distinct domains of cognition for each category; each carries its own assumptions and connotations. The fact that Maxi uses an artifact term highlights his sense of stillness and silence –his sense that the forest is inanimate and bereft of any signs of animal activity.

The use of the locative –**pi**, although obligatory in Quichua, is also telling. In addition to "on" or "at," it also means "in." For Luis and other Ávila Runa that have been caught in the forest during the windstorms that are so prevalent in September and October, the image of a tree base would also conjure a feeling of a much more visceral unity with this feature of the landscape.

During such storms, men will search out trees whose roots form wall-like supportive buttresses in order to insert themselves, upright and flush against the trunk, deep within the crevasses created by the these structures. They do this in order to protect themselves from the massive epiphyte-laden branches that are often snapped off by the wind and can come crashing down with deadly force. This is the kind of unstated but possible metaphoric image that the mention of **caspi siqui** might elicit in an Ávila Runa. As such, it would invoke an analogical chain that links first an inanimate tree base to a forest devoid of activity and then Maxi to this silent forest on account of the idea that hunters sometimes "enter" such tree bases to seek refuge.

Growing tired of waiting, Maxi left the tree behind and went down into a ravine to "look around"

MA: "**ñuca chaira masc- mascariu—sha**"
[I thought] "I'll still lo- look arou—nd a bit"

LA: **hm**

MA: **uraijurcani huaicumanta**
so I went down to the ravine

LA: **ye**

MA: **u- uraicu huasha**
after going d- down

•

(*more loudly*)

**mana quita ña**
[it] wasn't wild [i.e., it wasn't skittish like a wild animal]

**(***indicating with his head***)**

**casna shinamanda**
it was like just like from

**canba ya-**
your fa-

**cangunapa yayapa cuartu tupú'**
[the distance across] the length of your father's room

LA: **mhm**

MA: **shayá'**
it stoo'd

**shayá' -rarca**
and just sto' –od there

LA: **hm**

MA: **pa'- shayarcán-**
wow, I [too just] stood

•

(*somewhat more quietly*)

**"imana tucusha" yarcani**
"what's gonna happen to me?" I thought

LM: **hm**

•

MA: (*more loudly*)

**u'nai–ta yuyarish- shayani "mana ishtaitayasca"**
I stood there fo're–ver, thinking to myself, "it's won't allow itself to be shot" (?)

LA: **hm**

MA: **yuyarí- shayani**
I stood, thinking [like that]

LA: **hm**

MA: (*quietly*)

**ú'–nailla car-**
it was an é'–ternity

(*somewhat more loudly and with an aspiration [$^{h}$] in the first vowel signalling an intense burst of activity*)

**a$^{h}$–sh–ca**
[but then suddenly] lo–ts

(*with rising intonation*)

**shamunún**
come

LA: **ya**

MA: **mhm**

(*in rapid clipped succession*)

**huahuata nipi ichillata nipi**
young ones, small ones

Despite being one of the most species-rich ecosystems in the world, the Upper Amazonian forests often seem empty. Regarding their geographical survey of the Ecuadorian Upper Amazon, Sinclair and Wasson wrote: "we were impressed by the almost total absence of birds from great jungle areas" (1923: 209). The apparent paucity of wildlife is not related to the region-wide problem of overhunting (Redford 1992) –from which Ávila is by no means spared– rather, activity is temporally and spatially clumped in the forest. Enormous stretches of silence are punctuated, only intermittently and unpredictably, by a cacophony of sounds or a flourish of activity. Different species of birds come together in mixed flocks to forage through the forest canopies –stopping only at fruiting trees and leaving large tracts of forest eerily quiet. Mammals also take advantage of their mutual presences; in a Costa Rican rain forest I saw an agouti feeding off of palm fruit scraps being dropped by a spider monkey in the canopy. When danger approached, the agouti warned the monkey by letting out a cry as it escaped. Similarly, army ants moving through tracts of forest generate an enormous amount of locally concentrated activity as they flush out different kinds of insects that, in turn, attract mixed flocks of birds that come to feed on these.

I have also had this sense on several occasions in Ávila. For example, out in the forest with Hilario and his son Lucio we spent the entire day walking without encountering any animals. Finally, in the mid-afternoon, just as it was approaching time to turn back, we heard the shaking and swaying of heavy branches –an unmistakable sign that a troop of woolly monkeys was on the move. The son ran off after these and moments later we heard his gun fire. When we finally caught up to him I was surprised to find that he had not shot any of the monkeys. He had chosen instead to fire on a peccary that he practically stumbled on as he followed the monkeys.[7]

Maxi vividly captures with words how activity is clumped in the forest. Interestingly, however, he does not equate his first contact with one of the pigs, as a signal of a change in activity level. In this first encounter, the pace of the narrative is still very slow –Maxi continues to

take long pauses between phrases. Neither he nor the pig moves. The animal seems to be obstructed and Maxi is not able to shoot at it.

It is only when the rest of the herd catches up to this other pig that Maxi clearly marks a distinction between the frustrating stasis of waiting and the current frenzied activity. One way that Maxi gets at this sense of the sudden change in the forest is by establishing a series of contrasts in linguistic form that signal contrasts at the semantic level.

For example, he employs an unusual stress pattern. In Quichua, stress is normally placed on the penultimate syllable. Stress patterns that deviate from this norm are unusual or marked and can therefore be used to signal a change in at the semantic level. The stress of the first word of the phrase **ú'–nailla car-** (it was an é'–ternity) is highly unusual. It provides a contrast to the way that, in the next phrase, the last syllable of the final word is stressed instead of the expected second one: **a$^{h}$–sh–ca shamunún (**[but then suddenly] lo–ts come). This contrast in stress further highlights the sudden change in activity level conveyed semantically by these phrases.[8]

There is also a contrast in sound quality and prosody between the first phrase and the phrase that follows. Maxi says the first phrase, **ú'–nailla car-**, quietly, with his voice trailing off; he even heightens this indeterminacy by suppressing the third person preterite suffix –**rca** in the last word (the complete word would be **carca**). This recreates a feeling of monotony. Maxi then surprises Luis by uttering loudly and with a rise in intonation, "**a$^{h}$–sh–ca shamunún**." The last word of this phrase ends with a palatal consonant [check]. Here, the abrupt stopping of breath provides a sense of completion.

By stopping the stressed first syllable of the word **ú'–nailla**, Maxi seems to be alluding to his sense of frustration with waiting. He contrasts this with the use of the word **shamunún** in the second phrase to describe the sudden presence of the peccaries. Here, however, there is no hint of hesitation; the unstopped flow of this word provides a sense of forward movement; it thrusts Maxi into the middle of the action. What Maxi was anticipating as he waited and waited, finally was happening; he was suddenly dangerously close to a frenzied troop of wild pigs:

(*in rapid clipped succession*)

**huahuata nipi ichillata nipi**
young ones, small ones

The contrast between stillness and activity that Maxi establishes through his use of poetic language describes the patchy distribution (both in a spatial and temporal sense) of game throughout the landscape. This phenomenon is a major, and possibly under-recognized, characteristic of animal behavior in the rain forest. It is also one that Maxi deems worthy of comment and it is therefore an indicator of a kind of knowledge that is considered to be of local interest.

**Meaning and Knowing**

I want to stress this point that hunting stories and other narratives of forest experience are about knowing in some fundamental way. In order to do this, I contrast my interpretation of what Runa stories of forest experience are getting at with Renato Rosaldo's (1986) treatment of the hunting stories of the Philippine Ilongot.

I am particularly concerned with how Rosaldo treats knowledge in Ilongot stories and the implications of this for nature talk in general. Rosaldo's goal is to examine different approaches to the understanding of the importance of hunting for the Ilongot. An ethnoscientific approach, he says, would try to recreate the local taxonomies of knowledge surrounding this activity. Ethnographic realism, on the other hand, would provide a composite and idealized description of how a hunt would generally unfold. Ultimately, however, these two approaches tell us only how, "life is routinely lived" but not, "what can make life worth living" (1986: 98). Only by understanding the narratives the Ilongot recount of hunting, Rosaldo says, can we begin to understand the, "human significance" (1986: 120) of this activity.

While I share in many ways Rosaldo's enthusiasm for an interpretive approach that focuses on meaning, I take issue with the implicit distinction that Rosaldo establishes between knowl-

edge, on the one hand, and significance on the other. He seems to imply that these two concepts are mutually exclusive. He claims that, whereas an ethnoscientific or "realist" monograph would attempt to reconstruct indigenous knowledge, hunting stories are only about meaning: "the significance Ilongot men seek in hunting derives more from cultural notions about what makes a story (and lived experience) compelling than from the routine subsistence techniques usually portrayed in ethnographic realism" (1986: 98).

The goal of these narratives, according to Rosaldo, is to say something about the meaning that life has for the Ilongot as this becomes manifest in hunting and the stories this activity can inspire; knowledge about nature serves only as a shared background against which the Ilongot locate meaning:

> Thus, hunting stories […] can communicate in a telegraphic shorthand because speakers can safely assume their listeners' depth of knowledge about the landscape, hunting practices, the huntsmen's abilities, previous hunts in the area and elsewhere, and so on (1986:108).

I disagree with Rosaldo's treatment of knowledge in hunting stories as just so much "so on." I believe that one important reason why Rosaldo separates meaning from knowledge has to do not so much with how the Ilongot approach narratives but with how Rosaldo defines knowledge.

Ironically, Rosaldo's assumption that knowledge and meaning are separated seems to stem, not from a critique of ethnoscience but from a critique that is not radical enough. Rosaldo accepts the implicit meaning of the term "knowledge" as delineated in ethnoscience's definition of culture. That is, knowledge, for Rosaldo as for the ethnoscientists, is that exhaustive compendium of information that allows people to function in their society. Instead of criticizing this view of knowledge, Rosaldo allows this definition to stand –claiming only that hunting stories are not about knowledge. I would agree that hunting stories are not about knowledge as Rosaldo and ethnoscientists define this concept, but that this only points to a shortcoming of their definition.

Hunting stories, I claim, *are* about knowing nature but the form of knowing that they engage in does not fall within the purview of most anthropological definitions of knowledge.

With Rosaldo, I agree that neither Runa nor Ilongot hunting stories manifest the kind of knowledge that is the focus of ethnoscience. But this is because the kind of knowledge that interests locals is different from that which ethnoscience seeks to understand. Ethnoscience is concerned with establishing comprehensive maps of everything that locals know about a given domain; it would be preposterous to think that the function of these stories is to reveal such maps to locals, for they have no need to discuss this.

Rosaldo notes that many details about the environment that serve as context for the narrative's unfolding are omitted. This, he rightly explains, is because inhabitants of small-scale societies have so much overlap in life experiences that a lot of knowledge can simply be assumed (1986: 107). However, hunting stories, I claim, do not rely on the use of "telegraphic form" (ibid.) that ensues from this circumstance because they deem knowledge to be unimportant background. Rather, such condensed style is used, in Ávila at least, because it can better capture the processes by which the narrator comes to know things in the forest through experience.

Among the Runa, it is *this* experience of knowing that the narrator is attempting to share. Maxi, for example, never tells Luis that the event he recounts concerns peccaries. Luis, who is familiar with the behavior of these animals, can glean that information from subtle clues such as how Maxi describes their movements along the forest floor in mixed groups of young and old and the fear –however unfounded– these inspired in Maxi. Such omissions, however, do not mean that knowledge is irrelevant to the story. Rather, Maxi shares knowledge by allowing Luis to participate in the recreation of the process through which that knowledge emerged.

Rather than looking at the compression of information in hunting stories as a kind of telegraphic shorthand, it would be more interesting to look at it as a process of dropping clues. Instead of telling Luis that a peccary came, Maxi provides Luis with the same clues that allowed him to conclude that peccaries approached him. This indicates two ways in which knowledge is emergent in

this kind of narrative. First, Maxi seeks to portray the process of how he came to understand the forest. Second, meaning only emerges as a product of dialogue with Luis; although Maxi does the majority of the talking, he constructs knowledge through an implicit dialogue with Luis. The narrative is meaningless without the knowledge that Luis brings to it (Mannheim and Tedlock 1995: 8-12). The crucial distinction I am trying to make is that I view compressed descriptions as a means by which locals share knowledge through a process of poetically recreating those experiences in which knowledge emerges; Rosaldo, by contrast, sees these telegraphic descriptions as evidence of an unchanging, and taken-for-granted, background body of information.

Another problem with Rosaldo's treatment of hunting stories is his conflation of two assumptions: 1) that all experience is socially constructed; and 2) that local significance is only relevant in a human domain that is somehow cut off from the rest of the world. Rosaldo begins his article by saying: "In appraising unfamiliar forms of life, we need to know how cultural conceptions inform and thereby describe, in that peculiar circularity of the social construction of reality, people's commonsense worlds" (Rosaldo 1986: 97). The degree to which people's "commonsense worlds" are social constructed can be debated (see Chapter Two). For the moment, what I take issue with is the assumption that if "reality" is socially constructed, people everywhere must only be interested in the social. When he says that anthropologists should focus on the stories the Ilongots tell, "themselves about themselves" (1986: 98, 103) he seems to be confusing Ilongots with social scientists; whether or not "things" can be seen to exist apart from the socio-cultural context in which we perceive them is moot from a native point of view. Regardless of whether or not they are constructed, "things" are still extremely important to people. Stories that deal with forest experience are in many respects ultimately about the complex relationships people take on with their non-human surroundings. They are not just what people "tell themselves about themselves" but what they "tell themselves about themselves" *in the world*.

What I find so problematic about the exclusive focus on "meaning" is the way significance becomes alienated from the world in which it is found. By contrast, I want to establish a

framework in which meaning and knowledge are not separated –a framework in which they both emerge in the process of interaction with the world. This, I think is what hunting stories –at least those told in Ávila– are about.

Perhaps this unnecessary distinction between meaning and knowledge can be better understood by examining a related contrast established by Stoller. He addresses this issue when he asks of his fellow ethnographers: "Are we social scientists who seek to discover the invariate [sic] truths of social existence? Or, are we really storytellers who seek to recreate for our readers the texture of social life in other societies" (Stoller 1989: 151). Stoller's distinction between "invariate truths" and the "texture of social life," like Rosaldo's between "routine subsistence techniques" and "lived experience," are unnecessarily polemic. Meaning does not reside outside of texture; it is found in the knowing of it. By contrasting truth with texture, or routine with experience, both approaches separate the pursuit of knowledge about the world from meaning in a way that is unfaithful both to local and more removed attempts of "making sense."

**Sharing Through Simulating**

Maxi never says he was surprised by the sudden flourish of activity. Instead, *he* surprises; he conveys the experience of this sensation by eliciting surprise in Luis. Maxi's strategy indicates that the term "narrative" may not do justice to the kind of speech activity he is engaged in. There are important moments in which Maxi "breaks through" the confines of a narrative mode into performance (Hymes 1975). During these he eschews recounting experiences in favor of recreating them. In some dialects of lowland Quichua in which the use of witness validation suffixes are important, this "breakthrough" is signaled by the fact that no such suffixes are used (Nuckolls 1996: 114).

These kinds of "breakthroughs" are extremely important to how poetic language is connected to knowing nature. They are also revealing of the kinds of meanings that this way of talking attempts to capture. Up to now I have discussed how poetry operates to convey meaning but

I have not addressed the question of what kinds of meanings it conveys. Poetry need not be defined solely in terms of its form or how it is performed. Roy Wagner, for example, suggests that poetry should be seen above all else as a special way of sharing personal experience. He notes the difficulty of representing subjective experiences such as pain, or, in Maxi's case, surprise. He also notes that these subjective perceptions are that which seem most true to us: "For nothing could possibly be more clear, distinct, concrete, certain, or real than the self's perception of perception, its own sensing of sense. It is the very archetype, the inspiration, of everything we have ever imagined for the objective" (Wagner 1991: 39).

These personal experiences are very difficult to share. The best way is through an image-based simulation that elicits them in others: "such subjective perceptions can only be elicited in others through iconic means –by bodying them forth in the form of verbal or nonverbal imagery, substituting a felt meaning for a feeling, which becomes an intended meaning in the process" (1991: 37).

Poetic language, then, forms part of an attempt to share subjective perceptions, that, nonetheless, are felt to be objective truths. This is done by means of elicitation rather than reference: "Poetics is the means by which the inside of the human image, the internal perception, images itself, to itself and to others" (1991: 41). Maxi elicits surprise in order to share this feeling with Luis and in this way he uses creative language to transmit personal experience.

### *Sound Symbols*

For Maxi, the experience of burrowing pigs dispersing in every possible direction around him was positively frightening

MA: **pa-**
wow

**"micúngarahuanun" yarcani**
"they're gonna eat me," I thought

(*provoking both to laugh*)

**“micúngarahuanun” yarcá’-**
“they’re gonna to eat me,” I thought

In order to escape, he climbed a tree. Because it was raining, the pigs didn’t notice him as he climbed it:

MA: **mana riparanurca**
they didn’t notice

(*said quietly*)

**cuyú’ cuyú’**
when **cuyú’ cuyú’** [sound symbolic adverb focusing on the sound image of a person or animal moving purposefully and by doing so unavoidably making noise]

**sicapica**
I climbed

LA: **mhm**

MA: **tamiaca tsa—**
the rain [was coming down with a] **tsa—** [sound symbolic adverb imitating how droplets of rain disperse through the air]

**chiraicu mana riparanurca**
that’s why they didn’t notice

The word **tsa—** is part of a large class of words, known as sound symbolic adverbs, that are an essential part of lowland Quichua. Quichua sound symbols are a kind of lexicalized onomatopoeia that vividly and precisely represent the grammatical category of aspect; that is, they describe the relative durativity of an action. As Janis Nuckolls in her extremely provocative book

on Quichua sound symbols writes:

> They represent, for example, all of the possible positions in which a body experiences unobstructed movement through space or water. They may describe different kinds of contact with another body, degrees of penetration through a medium, or various types of opening and closing. Substances and objects that fall are described with sounds that indicate whether their own bodies are reconfigured or left intact by a fall. And there are large numbers of sound-symbolic adverbs that describe processes enacted by one's body, such as tearing, fissuring, cutting, and bursting (Nuckolls 1996: 6-7).

Like the other sound symbolic adverbs in lowland Quichua, **tsa—** (or simply **tsa**) achieves its meaning in large part through its iconic or imagistic qualities rooted in sound. Sound symbolic images are image icons in the Peircian sense. That is, they represent objects by means of the formal resemblances they share with them. These qualities of resemblance also exist in the sign independently of the existence of the object; they resemble objects by means of their own characteristics. In other words, image icons, "communicate vivid perceptions that stand for themselves, as they simulate sensory qualities" (Nuckolls 1996: 104).

**Tsa**, in the example above, refers to how raindrops are dispersed throughout the air. This is an imagistic icon because the mouth, beginning in a closed position, is opened ever wider to produce the sound. This act imitates the visual image of drops spreading out as they fall from the sky.

Another important quality of sound symbolic adverbs is the fact that the locus of representation is physiological. The characteristics that the sign shares with what it is referring to are embodied in the performer:

> The formal linguistic conception of language as an abstract code disconnected from the material world and from the body of the speaker is inadequate for the lowland Quechua. Sound-symbolically rendered impressions are felt, sensed, and embodied. […] Quechua speakers use the body to intensify their participation in the perceptual processes they simulate. The body becomes a resonance chamber for the sounds, rhythms, and processes of the natural world (Nuckolls 1996: 129).

It is the position and shape of the mouth as well as the way air comes out of it when the word **tsa** is pronounced that is equated to rain drops spreading out in the forest.

Maxi uses another sound symbol –**cuyú' cuyú'**– to describe how he climbed the tree. This adverb is quite commonly used in Ávila. It is a sound image that imitates how a person or animal moves purposefully through the landscape and, by doing so, unavoidably makes some noise. Maxi remained undetected because the sound **tsa–**, made by the light rain as it fell, blanketed out the inevitable sound **cuyú' cuyú'** associated with Maxi's action of climbing the tree.

Sound symbols foster a sensation of intimate engagement with nature and it is for this reason that their use is so prevalent when talking about forest experiences. They can do this because of their iconic nature. Through them, sounds and movements in the world are recreated through the sounds and movements of breath as it passes through the bodies of the Runa. This awareness that sound symbols are mimetic provides a powerful vehicle through which the Runa capture and share their experience of things by means of words.

I cannot stress enough the importance that sound symbolic adverbs play in the recreation of forest experience. Sound symbols are what constitute for the Runa the core of a performance. I was made aware of this when I was staying at Ventura's house. He had recently killed an agouti in the forest and I heard him, on several occasions, recreate this experience in performances that, in many ways, were quite similar to Maxi's. One day, however, his brother Camilo passed by his house on his way to another part of Ávila. Ventura was inside reviewing transcriptions with me. His brother was just outside, behind the split bamboo that constitutes the wall of the house. Ventura thought it necessary to briefly recount his latest hunting experience. However, because his brother was on his way elsewhere, and, more important, because Ventura's wife was not present to offer manioc beer, he compressed the story and told it to his brother in a matter of seconds as Camilo stood outside. He did this in what, at the time, seemed to me an unusual fashion. Rather than suppressing the "details" and only giving an abstract rendition of the outcome of the hunt, Ventura chose only to perform a string of sound symbolic adverbs that concisely transmit-

ted the salient features of the hunt. This happened so fast, unfortunately, that I was unable to record it.

***A Big Old Rump…***

As Maxi shimmies up the tree one of the peccaries comes into clear view. Rather than trying to describe this animal in an abstract fashion by, say, naming it, Maxi instead faithfully recreates the image that he saw

> MA: **sicabas**
> and as I climbed
>
> (*said with intensity and with rising intonation*)
>
> **á'tunllatalláta siquírucu nini**
> a big old rump, I tell you

Here the visual salience of the peccary's hind quarters is marked by reduplication of the emphatic suffix -**llata**. One might analyze this image of a peccary rump as an instance of figurative speech; it could be thought of as a reference to an object by means of one of its parts (synecdoche). Certainly there are some synecdochal relations that have become lexicalized in nature talk. For example, red brocket deer fawns (**chundárucu**) are often referred to simply as **muru** (mottled) because of the salience of the white splotches that are visible on the hides of immature deer (see Chapter Seven). However, Maxi seems to be doing something else. He seems to be attempting to faithfully reproduce exactly what came across his field of vision. If he would have said to Luis, "then I saw a pig," or something to the effect, he would be creating an abstraction; conjuring such a vantage-free ideal image of the animal would have been less compelling. Instead, by saying, "a big old rump," Maxi invites Luis to entertain the animal from his vantage-point. This focus on perspective is extremely important to Ávila attempts to capture nature expe-

rience in ways that are both precise and compelling. It also has important cosmological implications (see Viveiros de Castro 1998) that will be explored in Chapter Three.

Maxi then shot at the peccary

**chita**
at that

(*with intensity*)

**tya'**
**tya'** [sound symbolic adverb indicating successful firing of a shotgun]

**e—**
**e—** [imitation of sound made by peccaries when they are hit by shot]

**illaparcá-**
I fired

The adverb **tya'** is not an idiosyncratic imitation. It tells Luis precise information. Not only does it tell him the gun was fired (indeed the verb "to fire" –**illapana**– is redundant in this case and it is often omitted altogether when **tya** is used), it also tells him that the powder exploded successfully –propelling an expanding mass of lead shot. This again is sound symbolic along the same principle as **tsa**. **Tya'**, made with the mouth opening larger and larger, imitates the way in which shot originates inside the gun barrel and then spreads out in an ever-widening arc as it is discharged.

The handmade muzzle-loading shotgun used by Maxi is based on early 19$^{th}$ century technology and is notoriously unreliable. Because of the humidity, percussion caps often fail to explode and the powder does not always ignite fully. In addition, the hammer and barrel are often damaged by rust. Some men in Ávila contrast the adverb "**tya**" with "**tey**" which would be softly pronounced and without vowel elongation.[9] They use this latter adverb to describe a misfiring

of this kind of gun. In this second adverb the mouth does *not* open widely. This imitates the sound made by a cap that explodes but fails to ignite sufficient powder to propel the shot out of the barrel. If, in the context of this account, Maxi had used this term, Luis would have known that the gun failed to fire properly. In another portion of his conversation with Luis, Maxi contrasts **tya** with **tas** or **ta'**. These allude to the sound of the hammer striking the cap insufficiently hard to ignite it. Like **tey**, and unlike **tya**, the expansion of the mouth and the ensuing sound that is produced is stopped in these imitations.

The word "**e—**" imitates the distinctive sound that peccaries make when they are wounded. Because this word follows immediately after the word "**tya'**," Luis immediately knows the animal was hit by the shot. The two adverbs, **tya'** and **e—**, when heard in succession, conjure an image of a near instantaneous chain reaction; the moment the shot exploded from the gun, the animal was hit.

Maxi then simulates the frenzy of activity as the wounded peccary frantically tries to escape into a stream

(*with a very low pitched voice*)

**cuhuá— hua hua hua hua**
[imitation of the cries of a wounded animal]

**yacú'- yaculla**
right there in the stream

**pts'po–'u– rumagri-**
with a **pts'po–'u–** [sound symbolic adverb describing how an entity submerges itself under water] it fell in

"**cuhuá— hua hua hua hua**" is identified by listeners as the vocalizations of a terrified wounded animal. **Pts'po–'u–** (often simply, **tsupu**) is a sound symbolic adverb that iconically imitates the process of an object penetrating and then submerging under water. I quote Nuckolls to give

a sense of the rich meaning that this word has:

> The iconicity of **tsupu** is related to it dysyllabic structure, its bilabial stop, -**p**-, and its final open syllable. Its dysyllabic structure provides a framework within which a speaker can peformatively gesture either an idea of the sound of falling into water or a falling and subsequent path of movement underwater. The medial bilabial stop, –**p**-, the articulation of which involves a momentary cessation of air through the vocal tract, together with its immediately following vowel, which allows air to again pass freely through the vocal tract, are iconic of the brief contact and subsequent movement by an object through water (Nuckolls 1996: 159).

Maxi's use of two glottal stops in his performance of **pts'po–'u–** separates the syllables of this adverb. The stops seem to separate the moment of contact from the process of movement in water. In this sense they function in a manner similar to a slow motion shot in cinema (see also Nuckolls 1996: 104, 178-179). This sense of slow motion is compounded by vowel elongation. Slowing down the action in this way invites Luis to savor the details of this event and also alludes to a dramatic finality. This might not have been possible if Maxi were to have continued along the feverish pace that he had built up when he was describing how he fired at the peccary.

The drama, however, is ultimately couched in irony

(*rapidly, as an aside*)

**ñuca**
and me

**upaca "huañungami" yuyani**
foolishly, "it's gonna die," I'm thinking

LA: (*laughing a little*)

**ahá**

MA: *(surprised)*

**chi**
when

(*with rising intonation*)

**calpagripimá**
it suddenly ran off

•

**uh'**
damn

**snta**
like that

(*with rising intonation*)

**calpasa ri–n**
running it we–nt

By returning to a narrative mode, Maxi brackets off his previous simulation and signals that the narrative is ending. He tracked the wounded animal for a bit but was never able to find it. Days later other hunters, men who Maxi referred to as **sacha puri ru-** –literally forest-walkers, that is, hunters more experienced than Maxi– found the rotting carcass in a nearby fallow.

**The Aesthetic of the Immediate**

Terence Turner, writing of Kayapó understandings of the body, has argued that these implicit concepts need not only be, "objects of theoretical analysis;" they can also be, "theoretical constructs in their own right" (Turner 1995: 167-168).

Turner's approach is equally applicable to the Runa. That is, I believe that the theoretical implications of Runa aesthetics of experiencing the forest visible in poetic nature talk can help to suggest reformulations of approaches to nature knowing and human-nature relations in general in ecological anthropology.

Poetic talk is central to the Runa manifestation of, "the universally human effort of trying to bridge the gap between experience and representation" (Rudie 1994: 40). Maxi's attempt at bridging this gap involves the faithful recreation of personal experience by demoting analysis and abstraction in favor of a kind of language that is thought to convey immediacy. Maxi simulates raw experience; he makes it palpable to his listeners. This, as I have shown, is achieved in large measure by means of iconic and perspectival language and, more generally, by cultivating a stance that posits language *as* experience and not only as a tool to talk about it.

This Runa preoccupation with immediate experience and ways of eliciting it suggests the existence of a culturally specific aesthetic of nature knowing. By aesthetic I mean a system that attaches particular values to experience in ways that affect experience (Sharman 1997). By using the term aesthetic, I wish to follow Steve Feld (1996) in his uses of this concept to understand how the lifeways of the Kaluli of New Guinea articulate with the environment. According to Feld, aesthetics is *not* an asocial category focusing on virtuosity or beauty. Rather, it can help to show what people, "find affecting and moving about mundane and intensified experiences" (1996: 66). The usefulness of this concept for ecological anthropology lies in the fact that aesthetics can capture an orientation that is embodied, grounded in ecological practice, and yet culturally specific. It therefore allows us to get closer to a view of how understandings can be constructed but at the same time engage with a nature not of our making.

The Runa "aesthetic of the immediate," as I call it, which is visible in Maxi's recreation of his forest experience, has the concomitant effect of inculcating an attitude toward experience in nature that encourages people to focus on their immediate perceptions. It encourages people to engage in the world of experience with Zen-like mindfulness to the moment. In doing this the

Runa are cultivating what Robert Desjarlais calls a, "sensate awareness of life" (1996: 70). Through poetic evocation and reflection on forest experience, the Runa, in their own way, "make reflection emulate the unreflective life of consciousness" (Merleau-Ponty 1962: xvi).

The belief that experience can be transmitted as such is dependent on the Runa idea that embodied sound is consubstantial with the sounds of the natural world (Nuckolls 1996:96). Sound is thought to get at what nature "really" is like. Because the forms of poetic language, especially sound symbols, are iconic of elements of nature, words and things are united for the Ávila Runa. It is not that the Runa feel that they, as a people, are part of a unity with "nature" –as Nuckolls (1996: 101) concludes– but that they feel that their words can *access* nature. They feel that through talk there is a possibility for intimacy between people and the beings of the forest world.

Bruno Latour, writing about the relationship of scientific discourse to the things it purports to describe, expands on this idea of access

> The quality of a science's reference does not come from some *salto mortale* out of discourse and society in order to access things, but depends rather on the extent of its transformations, the safety of its connections, the progressive accumulation of its mediations, the number of interlocutors it engages, its ability to make nonhumans accessible to words, its capacity to interest and to convince others, and its routinized institutionalization of these flows (Latour 1999: 97).

For the scientist this correspondence between word and thing is achieved, ironically, by a distancing of the world through a series of transformations (1999: 79). In Latour's words, "the more filters […] the clearer the gaze" (1999: 137).

The Runa, however, feel the opposite –namely, that the word, "participates in the nature of the thing" as Malinowski said of the Trobriand islanders (Malinowski 1956: 322). Nuckolls, speaking of Quichua sound symbolic adverbs, elaborates:

> The movements of the mouth, the shaping of the vocal tract, and the fluctuating pitch of the voice are all uses of the body to imitate movements and processes of

> perceptual experience. By imitating these movements and processes, they achieve a sense of control over them. In this way, sound-symbolic language becomes a physiological force integrated with the natural and cosmological world, rather than an abstract, detached code of signification (Nuckolls 1996:122).

Whether or not this ability to access things through words is an "old realist fallacy," as Malinowski (1956: 326) held, depends on what is meant by realism. Runa nature talk constitutes an attempt to get at "things as they are" by claiming that this, in turn, is intimately related to, "things as they are experienced." That this claim may not be so unreasonable is explored in the following chapter.

Maybe the realist fallacy that is exposed by the Runa view is the existence of separate categories of "nature" and "culture" as valid units of social analysis (Strathern 1980). Michael Jackson gets at this when he suggests that a phenomenological perspective, by focusing on being-in-the-world, throws into question the idea of a definition of culture that excludes the, "somatic, sensory, and biological dimensions" of human ways of living (1996: 18). What the Runa view gets at –and this is its contribution to ecological anthropology– is a recognition that knowledge about the world is neither socio-culturally constructed nor can it be reduced to cognitive or biological givens. Rather, it is perspectival and it emerges within a context of creative engagement with the world.

**Conclusion**

In this chapter I have tried to understand the intersection between knowledge and meaning in the process of how the Runa come to understand nature. I see knowledge as an emergent property of situations –often involving the creative use of poetic language– in which individuals attempt to make sense of their forest experiences through dialogue with others. Such poetic language –long the focus of humanistic approaches– is deeply concerned with environmental context as well; the story I examine is not just about meaning but meaning-in-the-world. Meaning,

I argue, emerges in the process of capturing and sharing the texture of forest experiences. As such, significance is an important element of *knowing* about the forest. In large part through the poetic recreation of experience I have described, the Runa cultivate what I call an "aesthetic of the immediate." This encourages them to be attentive to immediate forest experience and to attempt to transmit this to others. This process constitutes an implicit theory about the way in which the relation between people and the world should be understood particularly regarding the value attributed to representation. As such, it can make an important contribution to ecological anthropology. The approach that the Runa aesthetic embodies encourages us to see knowledge about nature not as a cultural construction or a biological or cognitive given but as emergent in experience as it is lived, heard, and spoken.

# Chapter Two
# The Leaf That Grows Out Of Itself

## Introduction

In this chapter I want to establish a framework that can address how knowledge –which is dependent on our cognitive abilities and our social and cultural categories– can access a reality that is independent of these human constructs (Rappaport 1999).

Much of cultural anthropology has traditionally been concerned with the reciprocal goal of making the strange look familiar in order to make the familiar look strange. In other words, one objective of the ethnological endeavor is to study foreign practices that appear "strange" in order to reveal the cultural logics that give rise to them; by placing them in their appropriate contexts they become "familiar." If we apply this same process to our own "familiar" common sense assumptions and practices, these too are revealed to be culturally constructed and, in a sense, arbitrary; they thus become "strange."

This chapter, by contrast, is concerned with another process: "the journey from the familiar to the familiar" (Wisdom, quoted in Putnam 1994: 487). It is concerned with reconciling "familiar" common sense assumptions about the world with the way the world "is" in such a way that these assumptions do not necessarily become "strange." It is concerned with establishing a theoretical framework that can address how we can view the relationship between knowledge and reality in a manner that is compatible with our –or the Runa's– every day understandings of, and engagements with, the world (Putnam 1994: 517). That the existence of the world "out there" seems to be a fact, is not only due to a process of naturalization of socio-cultural constructs –i.e., the familiarization of the "strange;" it also has to do with the various everyday ways in which we, as humans, are engaged with it. It is in this sense that this chapter is about, "the journey from the familiar to the familiar."

In order to develop this framework, I explore the question of what kind of biological real-

ity is reflected in the way the Runa name and classify biological taxa. My claim is that both the realist position manifest in much of the ethnobiological literature and the constructivist critiques of this approach come out of a shared theoretical tradition that has created many problems. As I have alluded to in the previous chapter, and will develop in this one, both of these approaches share certain assumptions about the nature of reality and what knowledge of it means –even if they differ regarding whether or not that knowledge is relevant to anthropological concerns, or even possible.

To address this problem of the nature of the connection between situated knowledge and the biological world, I will take a critical look at how Brent Berlin's (1992) treatment of ethnobiological classification might be applied to understanding those taxa that the Runa consider anomalous. I choose to look at Berlin's work for two reasons: 1) he steadfastly insists that ethnobiological knowledge is about a non-human biological world and this is a position that I would like to maintain, and 2) he provides detailed treatments of the minutiae of the biological world that ethnobiological knowledge engages with. Any kind of critique of his approach must do justice to the complexities of the biological world and the sophisticated ways he describes by which people struggle to come to terms with these. As I hope to make clear, my problem with Berlin is not with his assertion that ethnobiology is connected to the non-human world in a systematic way, but with his understanding of the *nature* of this connection.

**Anomalies**

The Runa often highlight taxa that somehow do not fit what they deem "normal." Regarding animals, the anomalies are often behavioral. For example, one day when I was in the forest with Hilario and his son Lucio, we came across a small bird of prey, known as **pishcu anga** (hook-billed kite), that was perched in the understory. Lucio fired at it with his shotgun but missed. Frightened, the bird flew off in a strange manner; rather than flying rapidly through the understory, as raptors are expected to do, it moved quite slowly. As he pointed in the direction in

which it went, Lucio commented

**alillashtu rirca**
it just went slowly

**tca tca tca tca**
[flapping] **tca tca tca tca** [a sound symbolic adverb]

**chi**
there

**Tca** is a sound symbolic adverb that describes a sound image of wings flapping slowly, and somewhat awkwardly, with discrete intervals between each flap. As such, it seems to be related to the sound symbolic adverb **ticu**, which is used in Ávila to describe clumsy ambulation. For example, a toddler learning to walk can be described as **ticu ticu puriran** (s/he is walking with an uncertain step). The image here is of a child with an unsteady gait rocking precariously from side to side. I have also heard this adverb used to describe the uncertain steps of a newborn fawn:

**murulla huahuashtu**
just a little mottled baby

**yanga ticu ticu ticulla**
just barely wobbling

**huahuashtu car-**
just a baby

This same adverb can also be used to describe the clumsiness brought on by drinking too much of the caffeine-rich **huayusa** tea which, when boiled too long, "can cause intoxication to the point of becoming jittery" ("**ticu ticu tupu machachin**").

What seems to have captured Lucio's attention was that this bird flew off slowly. In some

sense, such an act can be considered poetic; this bird was standing out as a unique individual by breaking out of an expected behavioral structure that predicts that raptors should fly off quickly (see Chapter One). This seems to have been what fascinated Lucio with this experience –indeed, he spoke of this several times throughout the day in much the same fashion.

Ornithologists describe the hook-billed kite as a small raptor with, "broad lanky wings" that is known to be, "rather sedentary and sluggish." It is often found perching in canopy foliage and eats snails (Hilty and Brown 1986: 91). Compared to other raptors that exhibit swifter flight, this bird is clearly anomalous. And Lucio appropriately captures this with the adverb **tca**.

On a trip to the forest with Hilario and Lucio a few days later, I had another opportunity to observe how people in Ávila react to animal behavior that they consider to be out of the ordinary. It was around seven in the morning. We had been walking less than a quarter of an hour and were still in the secondary forest just beyond Hilario's wife's gardens when we came across a troop of raccoon-like coatis (**mashu**) in the canopy of a **huangashi** tree (*Eugenia* sp.?, Myrtaceae). The coatis were feeding on its ripe black fruits. Lucio shot at one and we all ran to the base of the tree as the entire troop –perhaps a couple dozen individuals– began jumping out and rolling themselves into balls, before plummeting to the ground. The specter of coati bodies raining down all around us prompted excited whoops and laughs from Hilario and his son. After a few exhilarating seconds the only remains of the troop's presence were a baby coati that Hilario managed to catch and a swarm of flies and mosquitoes that had latched on to us as a substitute for the coatis they had been parasitizing until their sudden flight. As he searched for signs of the coati that his son had tried to shoot, Hilario turned to me and commented, "**lucu mashu**" ("crazy coatis" –from the Spanish *loco*, crazy). By calling the coatis crazy, Hilario was signaling their unpredictable nature. He seemed to be saying, "how audacious of them to just drop down on us out of a tree in that way." Although thought of as "crazy," such behavior is well known as part of the standard evasive strategy of coatis (see also Emmons 1990: 139). This fact, however, did not diminish the surprise it caused nor the anomalous position that this kind of behavior places

these animals vis-à-vis other taxa that travel in troops in the canopy and are much less daring in their ways of escaping danger.

In Ávila, many animals are considered anomalous not because of their behavior, as in the case of the hook-billed kite and the coati, but simply because they appear outside of their range. Like matter that becomes dangerous by virtue of the fact that it is "out of place" (Douglas 1984) these animals, when out of their normal contexts, are often considered ominous.

Some animals that are considered unremarkable in certain contexts are considered inauspicious when found in unexpected ones. Encountering these under such circumstances is often thought of as a bad omen (**tapia**). Such omens are often interpreted to mean that a relative will die (see Chapter Six).

These ominous animals are also often thought of as demonic (**supai**). One such example is the speckled chachalaca (**huaturitu**). This is a common diurnal game bird. If it is heard calling at night, however, it is considered demonic. Other examples include nocturnal birds such as the ferruginous pygmy-owl (**yahuati pishcu**), the tropical screech-owl (**bulullu**), and the occilated poorwill (**huagra tuhuayu**). When these are found near houses –as opposed to their expected forest domains– they too are considered demonic.

Discussing illustrations of this last bird and its relatives (using Hilty and Brown 1986: 240), Ventura remarked, "when it is just a normal **huagra tuhuayu** on its own it looks like this [pointing to the illustration of the occilated poorwill]. When it turns into a demon, it becomes like these kinds [pointing to illustrations of the swallow-tailed and lyre-tailed nightjars –found in the Andes and unknown to Ventura– that resemble the poorwill except that they have greatly elongated outer tail feathers] ("**yanga paipa munailla huagra tuhuayu casaca casna ricurina can. Supai tucusaca cai tunu tucun**"). Ventura's comments provide insights into the ways in which the anomalous nature of birds "out of place" is imagined. The elongated tail feathers of the nightjars that Ventura pointed to and identified as demonic transformations can be as much as four times the length of the bodies they are attached to (Ridgely and Greenfield 2001: 234-235).

Although Ventura had never seen such birds, their tails are strikingly anomalous and this quality was therefore imagined as befitting a bird transformed into a demon on account of it being found out of its expected place.

Poisonous snakes are thought of in a similar fashion. In the forest they are "just snakes." If found around houses, by contrast, they are assumed to have been sent as a kind of spirit dart (**biruti**) by a sorcerer as a means of attacking one of his victims. At a communal meeting I attended, a fer-de-lance (**ardilla machacui** or **shishin**, *Bothrops atrox*) suddenly appeared in the meeting house. It had slithered under the wood plank wall and stopped under the bench on which some young men were sitting. Several at the meeting later remarked that it was no coincidence that the snake appeared near those men whose families were involved in a conflict with a greatly feared old shaman. When I later asked about the meaning of this snake entering the building, an elderly woman responded, "it is not by accident that [poisonous snakes] enter into a house" ("**mana yanga huasimanchu yaicunun**").

Not long after the snake was scared off, the shaman himself –quite drunk– barged into the meeting house. He bragged of his powers to ensorcell and began singing the melody of a popular Quichua song appropriately titled **Tapia Pishcu** (Omen Bird), about the dangers associated with these inauspicious creatures. He then stormed onto the stage and began to punch the terrified president of the community. Matter out of place matters; it is in situations like this one that I witnessed at the communal meeting that anomalous creatures, such as demonic birds and poisonous snakes, become linked to, and make palpable, forces of violence and malevolence.

Occasionally, birds that are normally restricted to lowland riverine habitats, such as the hoatzin (**shasha**), the green ibis (**tura tura**), and herons (**garsa**) will find their ways to the premontane Ávila region. These cause consternation because, when out of their range, they are considered to be either generically demonic (**supai**) or, alternatively, they are thought to be manifestations of the spirit darts of riverine shamans. As Juanicu explained, "we don't want [them around here]" ("**ñucanchi mana munanchi**"). In the lowlands, however, these are not dangerous

because they are “in their place”; “down in the lowlands, they are unremarkable” (“**uraiman yanga**”).

By contrast, several species of birds –whose ranges are generally restricted to the higher elevation montane region west of Ávila– are also occasionally found near the village but are not considered demonic. Rather than being thought of as anomalous, and hence dangerous, the activities of these birds –as opposed to, say, the lone lowland waterfowl that occasionally appear mysteriously in Ávila territory– can be easily observed and their motivations can be readily understood. For example, for several days in early September of 1998 between quarter of seven and seven in the morning, Ventura and I would spot a flock of between fifty and a hundred parrots flying very high overhead eastward toward the lowlands. Every evening, shortly before dusk, we would see them fly back again. The Runa identify these as **culuhuiri** or **curuhuillu** –the scaly-naped amazon. They explain that when **cuquindu** (*Guarea* spp., Meliaceae) trees are in fruit in the Ávila region these birds descend on a daily basis from their territories around the mountains Sumaco, Huagra Urcu, and Yana Urcu to feed and then return again every night to sleep. Indeed, I had observed them feeding on these trees on one occasion.

Unlike the waterfowl, the sighting of a flock of these parrots is not considered anomalous. This is because the reasons for their “visits” to Ávila are readily comprehensible. They conform to established Runa strategies of access to resources. Like these birds, the Runa also take advantage of the altitudinal gradients that cause certain resources to fruit at different times. For example, the coveted **chunda** (*Bactris gasipaes*) fruits at lower elevations well before it does at higher ones. In the early part of the season, people from the lower parts of Ávila will invite their relatives from the higher parts to drink **chunda** beer. As the season progresses, and the trees are no longer in fruit in these lower parts, relatives in the higher regions will reciprocate and invite their kin from the lower parts to partake in their beer (see Chapter Four for several related examples).

The operative distinction that determines if an animal is to be considered anomalous is whether or not its behavior departs from what is considered **yanga**. The term **yanga** is often

translated as “no good” or “worthless” but in many contexts it more accurately means “unremarkable” or “unmarked.” Matter “in its place” is simply **yanga**. It is matter out of place that is dangerous.

What constitutes the normative such that when something deviates from it, it becomes dangerous? One way to get a sense of such patterns is to examine plants and animals that are considered anomalous.

In some contexts, **yanga** can be contrasted with **lucu** (crazy). Craziness is associated with erratic, uncontrolled movements. A major danger of using “love” charms (**pusanga**) is that they can cause such craziness. For example, a man can look through the hollowed-out wing bone of the sunbittern (**sanana**), a heron-like bird, at a woman he wishes to attract. When the man’s gaze falls on the woman she will be, “shocked by its a current, it will make her notice, as if she had been hit by something” (“**paipa zingra japin, riparachin, tacascacuinta**”). The Runa say this bird wags its rear and equate this with the movements associated with copulation.; Ridgely and Greenfield (2001: 130) describe this motion as a “swivell[ing of the] body from side to side.” This is why parts of this bird can be used as a “love” charm.

The Runa, however, do not seem to use such charms. Most people feel that these are dangerous, for they can cause both the men that employ them, and the women that they attract, to become insane. Similarly, the meat of this bird is not edible. A person that eats it “will become crazy” (“**lucu tucuringa**”). Indeed, “love” is not a wholly accurate descriptive for such charms. What they cause is an uncontrollable attraction that is considered beyond the norms of acceptable (i.e., normal) human etiquette. Indeed, it has been remarked, as far back as the 19$^{th}$ century, that the Runa do not cite physical attraction as a factor in choosing spouses (Osculati 1990). Rather, they look for features in their potential spouses that indicate that they can keep such urges in check; the ideal spouse, for example, should be hard working. In some contexts, then, **yanga**, the unmarked and unremarkable, can be contrasted with **lucu**, the aberrant.

Indeed, the most strictly followed dietary taboos in Ávila involve the prohibition against

eating the meat of animals classified as **lucu** by people that are ill or convalescing. Such tabooed animals include –in addition to the aforementioned coati– the Spix's guan (**puca pahua**). This bird is known to jump back-and-forth from branch to branch. Such erratic behavior goes against the Runa etiquette of decisiveness and self-control; ideally, animals are to resemble people in their calm and calculated demeanor and behavior. This prohibition is taken very seriously. At communal parties or meetings there are always two pots of soup. One can contain meats from animals including those classified as **lucu**; this soup is for healthy people. The other is made without such meats for people that are ill.

Very early in my fieldwork, I learned that my own erratic and unpredictable behavior was frowned upon. I too was expected to conform to the norms of etiquette that are applicable to the Runa and animals alike. One night –as is customary in most Runa households– I had been given a bowl of **huayusa** tea to drink. Usually a woman prepares this tea and then serves it to people. She circulates around the house and wakes people, one by one, by approaching their beds and quietly saying, "**huayusa**" before handing them a steaming bowlful of the tea. I had been given a very large bowl that night and, although I was enjoying drinking the tea tremendously, I feared that if I drank too much, the caffeine would later keep me from going back to sleep. For this reason, after having finished two-thirds, or so, of the tea, I followed the local custom used to signal that I had had my fill. I extended the arm with which I was holding the bowl and said, "**pagarachu**" (thank you). Unfortunately, the woman that had been distributing the tea was occupied serving someone else and could not immediately come to receive the bowl. As I waited, I took another sip from some of the liquid that I had left in the bowl. This act immediately prompted a snide remark from this woman's mother-in-law to the effect that if I had not finished drinking why return the bowl? It is this sort of double-minded indecision that the Runa find so offensive.

In this respect the "crazy" Spix's guan is compared to the common piping-guan (**yura pahua**). The latter is often referred to as **ali pahua** –the good, proper, or prototypical guan. In contrast to the Spix's guan, this guan is very quiet and decisive about its movements and it there-

fore better approximates the correct behavior of beings –be they animals or humans. The common piping-guan –usually simply called **pahua**– is the "unmarked" form of guan; this bird is unremarkable on account of the way it exhibits Runa values in its comportment; it is therefore suitable as food in the context of illness.

Animals tend to be marked as anomalous because of their behavior, plants, by contrast, are sessile. Therefore, the anomalies they exhibit tend to be at the level of morphology. Structural anomalies are the botanical equivalent of the faunal category **lucu**. Because morphology tends to be a major axis of classification in folk biology, these anomalies have important ramifications for understanding the "normal" patterns of classification and nomenclature that are the traditional focus of ethnobiology.

If I have dwelt on anomalous animals, it is to show that local systems of classification of natural kinds are myriad and overlapping. As I will discuss in subsequent chapters, taxa can be classified and linked to each other for a number of reasons that can include such diverse logics as whether or not they drink blood (Chapter Six), what type of blood they have (Chapter Four), the metaphoric ties that link them to other organisms (Chapter Four), and the kinds of kinship ties they are seen to have with other animals (Chapter Four). Although morphological anomalies of plants may well point to features of the natural world that are not strongly influenced by cultural variables, such anomalies must be understood to imbricate with more inclusive notions of order that include the kind of "behavioral markedness" that I have discussed regarding animals. Morphology certainly influences classification but it is only one such factor.

Examples of anomalous plants include **quingu yuyu** (*Banisteriopsis* sp., Malpighiaceae), an herbaceous runner that Juanicu planted in his garden in the protected space between the buttresses of the leguminous **jambi caspi** (*Dussia tessmannii,* Fabaceae-Faboideae) so that it would not be trampled. Juanicu had propagated cuttings of this herb from his previous garden and he considered it a very old Ávila cultivar. **Quingu** means bend or turn in Quichua. For example, the numerous sharp bends of a meandering river can be described as "**quingu quingu**." **Quingu**

**yuyu** is an apt term for this plant because the leaves are quite unusual in that they bend back on themselves.[10] Because of this attribute, the pulverized ashes of this plant are placed in the food of hunting dogs so that instead of chasing animals in a straight line away from their masters, they will chase their quarry on a path that loops back on itself –just like the leaves of this plant.

Another example is *Selaginella speciosa* (Selaginellaceae), known as **huamani accha**. Women use this plant to wash their hair so that it will grow long like the "leaves" of this plant. What the Runa consider anomalous about this plant is that unlike the true ferns (Pteridophyta), with which the Runa class this taxon, its "leaves" appear to exhibit indeterminate growth. Therefore, they resemble the long flowing hair of healthy Runa women. A biologist might explain that this is due to the fact that the Runa are actually comparing the compound frond of the fern (a determinate structure) to the *Selaginella's* aggregation of microphylls that can continue to grow, one after the other, in a seemingly indefinite manner. That this *Selaginella* is used to make hair grow longer is logical for the Runa given that many ferns, such as **yacu huasca** (*Grammitis lanigera,* Pteridophyta-Polypodiaceae) with which it is classed, are used to treat the related problem of hair loss.

Not all plants that are considered anomalous are utilitarian, however. Some are just recognized as interesting because of their strange morphology. For example, one morning, Hilario came back from a hunt with a plant for me. I had been living in his house for several months. At that early stage in my dissertation project I was primarily concerned with making ethnobotanical collections and Hilario had a local reputation of being quite knowledgeable on the subject. Although we would often take long walks in the forest to collect plants, until that morning, it had never occurred to Hilario to bring me a plant. This plant, however, had caught his attention. From his shoulder bag he pulled out a leaf package which, when unwrapped, revealing an epiphytic cactus with light purple flowers (*Discocactus amazonicus*, Cactaceae). Hilario called it **viñarina panga** or **viñari panga**, because, as he explained, "**pangamanda viñarin**" –"it sprouts from its leaves." It had no use, Hilario remarked. Although, as with other succulent epiphytes, such as

orchids, he thought that the macerated stem might make a good poultice to apply to cuts. Because the leaves of this plant appear to grow out of other leaves, this plant was regarded as anomalous and this is what piqued Hilario's curiosity.

**Nature's Basic Plan**

What are we to make of Hilario's recognition that the epiphytic cactus *Discocactus amazonicus* is somehow strange? What does it reveal about what the Runa consider to be "normative" about the plant world? Brent Berlin would hold that Hilario's recognition indicates the Runa's unconscious appreciation of the structure of biological reality, as evidenced by the fact that they mark this taxon as deviating from the norm. According to Berlin, ethnobiological systems of taxonomy are transparent reflections of a biological reality:

> The human observer, psychologically endowed with innate capacities for categorization, almost spontaneously perceives the readily recognizable patterns inherent in the ways that evolution has worked. This unconscious recognition of nature's plan ultimately emerges as the cognitive structure that we know as a society's system of ethnobiological classification (Berlin 1992: 261).

Berlin contrasts his position to that of cultural relativism that takes the view that the relevant world in which humans live is one of social and cultural construction:

> human beings everywhere are constrained in essentially the same ways –by nature's basic plan—in their conceptual recognition of the biological diversity of their natural environments. In contrast, social organization, ritual, religious beliefs, notions of beauty –perhaps most of the aspects of social and cultural reality that anthropologists have devoted their lives to studying—are constructed by human societies…When human beings function as ethnobiologists, however, they do not construct order, they discern it (1992: 8).

Following Berlin, I want to uphold this interest in how our knowledge is connected to the real world. That is, I want to, "do justice to our sense that knowledge claims are responsible to reality" (Putnam 1994: 446; see also Bhaskar 1998a: x). Nevertheless, I think that there are sev-

eral problems with Berlin's model. I do not take issue with the claim that ethnobiological knowledge is in very fundamental ways about biological reality; what I question is Berlin's portrayal of the *nature* of that connection.

In trying to understand the limitations of Berlin's approach, the insights of the philosophical school known as critical realism, associated primarily with the works of Roy Bhaskar, can be very illuminating.[11] Bhaskar's study of the relationship of scientific knowledge to reality can be equally applied to the anthropological debate regarding the relationship of ethnobiological knowledge to an underlying nature. Bhaskar identifies two dominant positions in the philosophy of science that speak to this relationship. He calls the first "classical empiricism" and he traces it to Hume. According to this view, we can readily know reality through our sense experience of it:

> Knowledge and the world may be viewed as surfaces whose points are in isomorphic correspondence…On this conception, science is conceived as a kind of automatic or behavioural response to the stimulus of given facts and their conjunctions…Thus science becomes a kind of epiphenomenon of nature (Bhaskar 1998b: 19).

When Berlin describes ethnobiological knowledge as the outcome of, "human beings' inescapable and largely unconscious appreciation of the inherent structure of biological reality" (Berlin 1992: 8), he is rehearsing precisely this view.

According to Bhaskar, the second, and competing, view in the philosophy of science is "transcendental idealism." He sees this as originating with Kant. According to this view all knowledge is a human construction:

> the objects of scientific knowledge are models, ideals of natural order etc. Such objects are artificial constructs and though they may be independent of particular men, they are not independent of men or human activity in general […] the natural world becomes a construction of the human mind or, in its modern versions, of the scientific community (Bhaskar 1998b: 19).

This is precisely the view that causes so much concern for Berlin. If we can only know

the world through our construction of it –whether that construction is taken to be cognitive, social, or cultural—how can we ever know anything about the "real" world separate from humans?

Perhaps Bhaskar's most important insight is that these opposing views, seen as the only two possibilities, are actually two sides of the same coin; as Bourdieu (1977) would say, they are part of the same *doxa*. This "doxic" quality makes it difficult to theorize an alternative position that seeks to recognize the, "continued independent reality of being […] in the face of the relativity of our knowledge" (Bhaskar 1998a: x). Each of these two positions assumes that the other is the only theoretical alternative.

Bhaskar, however, shows that both can be subject to the same critique. Both positions, he argues, subscribe to an "epistemic fallacy:" "The Western philosophical tradition has mistakenly and anthropocentrically reduced the question of what is to the question of what we can know" (Bhaskar 1998a: xii). By this he means that both positions have a shared understanding of ontology. They both use the category of experience to define the world. As such, they give an "ontological function" to an epistemological concept (Bhaskar 1998b: 21); they conflate how we know the world with the way the world is. The empiricists hold that experience can give us direct knowledge of the world; the transcendental idealists hold that we can only know that which we experience. These two positions only differ in the weight they give to experience. For the empiricists it is a transparent window onto the world. For the idealists the interface of experience is the *only* knowable world.

The problems associated with this conflation of epistemology and ontology are evident in Berlin's work. For example, it can be seen in his explanation of why folk taxonomies are often polyphyletic from the perspective of evolutionary biology. Taxa delineated by folk classifications do not always represent the most closely related descendents of an evolutionary lineage. Instead, folk taxonomic groups can include members of many disparate phylogenetic lineages (this is known polyphyly). Scientific classification, by contrast, strives to create taxonomic groups that conform to single evolutionary lineages (known as monophyly). Berlin explains this discrepan-

cy between an evolutionary pattern "in nature," on the one hand, and the patterns evident in many folk schemas, on the other, in the following way: "When the familial affiliation of species of some intermediate taxon differ, it can usually be shown that the species nevertheless exhibit similar morphological features that lead them to be grouped as perceptually related" (Berlin 1992: 149). His position becomes clearer in his discussion of how genera are grouped into "covert" (i.e., unnamed) family ranks:

> When two or more families are involved, such as the Aguaruna strangler figs, which draw on genera from the Moraceae and the Guttiferae, the stem habit similarities of the species involved make them unmistakably perceptually related. All show hemiepiphytic or epiphytic growth patterns, in that they seek the support of other trees in the early stages of development […] Similarly, the Tzeltal groupings of bananas and their relatives (Musaceae, Cannaceae, and Zingiberaceae) brings together perennial large-leafed herbaceous monocots placed by some botanists in the same order (1992: 178).

Brent Berlin presents this argument to make the point that the intermediate-rank of family "makes good biological sense" (1992: 148) and, as such, it is not usually the result of the "economic significance" of the species in question (1992: 149) or some other concern constrained by social or cultural constructs. Because of his empiricist position, Berlin places perception in the camp of ontology instead of in the camp of epistemology where it belongs –side by side with cultural and social constructs. That is, it is my contention that our abilities, as humans, to comprehend a "nature's basic plan" is constrained as much by our perceptual abilities and limitations as it is by social or cultural variables. As such, perception is part of how we come to know nature (epistemology) rather than an attribute of what nature is (ontology). Because he conflates ontology with epistemology, Berlin is forced to hold the untenable position that a grouping of strangler figs, whose unrelated members have similar habits due to convergent evolution, is an equivalent observation about "nature's basic plan" as the delimitation of the banana relatives (all part of the Order Zingiberales) that share morphological similarities because they are part of the same evolutionary lineage. Because of his confusion between how we perceive the world and how the world is,

Berlin's scheme does not allow us to appreciate how taxa that are grouped because they share morphological traits that are readily perceived by humans can actually reflect different kinds of biological information that do not involve observations about evolutionary relatedness.

Developing a position he refers to as "transcendental realism," Bhaskar establishes a way to reconcile the fact that our knowledge can access the real world without having to subscribe –as Berlin does– to the position that there needs to be an isomorphism between ontology and epistemology for this to be so. He does this in the following way. First, he makes a distinction between objects and the experienceable phenomena they produce. The objects of our knowledge produce phenomena, but are not reducible to those phenomena themselves. Nor are those objects constructs that are imposed upon the phenomena by humans (Bhaskar 1998b: 19). Second, we are dependent on experience to understand the world. For example, scientific experimentation is a controlled process by which observable phenomena are brought "in phase" (1998b: 19) with the laws that produce them. The final point is that, despite this reliance on experience, we are not dependent on it to establish that an ontological domain must exist independently of our abilities to know it (1998b: 21). Bhaskar provides what is known as a Kantian "transcendental argument" to support this claim. Such an argument is one whose conclusions must be true in order for experience to be possible (Bhaskar and Lawson 1998: 4). Science, according to this argument, presupposes the existence of an independent ontology in order for its practice to be possible:

> It is not necessary that science occurs. But given that it does, it is necessary that the world is a certain way. It is contingent that the world is such that science is possible. And, given that it is possible, it is contingent upon the satisfaction of certain social conditions that science in fact occurs. But given that science does or could occur, the world must be a certain way. Thus, the transcendental realist asserts, that the world is structured and differentiated can be established by philosophical argument; though the particular structures it contains and the ways in which it is differentiated are matters for substantive scientific investigation (Bhaskar 1998b: 22)

It is precisely the lack of necessary connection between epistemology and ontology that

provides for the possibility of seeing things from multiple perspectives: "If changing experience of objects is to be possible, objects must have a distinct being in space and time from the experiences of which they are objects" (Bhaskar 1998b: 24). And it is only by this separation, the realization that our knowledge is partial, that we can come to know the world:

> It is only if the working scientist possesses the concept of an ontological realm, distinct from his current claims to knowledge of it, that he can philosophically think out the possibility of a rational criticism of these claims. *To be a fallibist about knowledge, it is necessary to be a realist about things. Conversely, to be a sceptic about things is to be a dogmatist about knowledge* (Bhaskar 1998b: 32, emphasis mine).

There are two levels at which this view of ontology is applicable. One is at the level of theory making in anthropology. Through my critique of Berlin's position, I hope to have shown that at this level, this view is indeed applicable.

It is another question altogether, however, to ask whether it is also operative at the local level. How limited are Amazonians by their cosmologies? How do they deal with phenomena that do not conform neatly to the models they use to understand the world? There is a long tradition, stemming in large part from Lévi-Strauss (1966), of contrasting "primitive" cosmology with Western science. Folk societies, according to this view, cannot step out of their worldviews but must use the elements they find at hand to understand the world. Scientists, on the other hand, are less certain about what they know and are thus open to the idea that there is an ontology that is not directly accessible to them. As Lévi-Strauss notes, "the engineer is always trying to make his way out of and go beyond the constraints imposed by a particular state of civilization while the '*bricoleur*' by inclination or necessity always remains within them" (1966: 19). This approach has encouraged many anthropologists to look at Amazonian understandings of nature as circumscribed by a strict cosmological logic. Bruno Latour cites these studies as evidence for a major difference between the knowledge systems of "modern" people and those of the "premoderns" (Latour 1993: 42).

Lévi-Strauss *et al*. are right in many ways. Amazonians, at least, do not exhibit the kind of continuous questioning of their worldview that is typical of western science. Nor do they create "experiments" in an attempt to test their models. In fact, they often couch their statements about the world in such a way so that they cannot be easily falsified. For example, one Sunday morning I was preparing for the long hike out of Ávila and asked Luisa, Hilario's widowed sister, whether she thought it would rain. She replied, somewhat jokingly, "it won't rain on account of the fact that today is Sunday [i.e., a day of rest prescribed by God]" ("**mana tamianga dumingumanda**"). Later that morning it did indeed rain and I got quite wet. Luisa is able to sustain a certain, readily falsifiable, belief –which, in fact, is held by many people in Ávila– by hedging her claim. By phrasing this statement as a joke she was able to simultaneously affirm and disavow it.

There are, however, other examples that seem to indicate that the Runa feel that their models for understanding the world are imperfect and tentative –this would seem to throw into question the distinction, proposed by Lévi-Strauss, between the folk *bricoleur* and the western engineer. That this is so can be seen by examining an incident in which a jaguar killed the dogs that belonged to Luisa and her family. Reflecting on this event led her and the other women in the house to conclude that their model of how the world works –which should have allowed them to predict the deaths of their dogs by interpreting how these animals dreamt– failed. This prompted them to admit that their models were, in some circumstances at least, inadequate for understanding the workings of the world (I explore this case in much greater detail in Chapter Five). This is an example of a situation in which an interpretive paradigm fails. Luisa and the other women were not able to explain the dogs' deaths using the models at their disposal. This doubt, however, did not prompt them to question whether such models still worked in general.

Knowledge systems seem to be recognized as inadequate at times by locals. The Runa also recognize that a one-to-one correspondence between epistemology and ontology is not possible. They are constantly reminded of the complexity of the world and the shortcomings of their

models to capture it.

Furthermore, what people find interesting is found at the limits of what is known. This is why Luis was fascinated with a raptor that alighted with a "**tca tca tca tca**." As I argued in Chapter One, reciting what is already known –the ethnoscientific model of what constitutes knowledge– is not a locally interesting act of knowing.

Another approach, complementary to Bhaskar's, regarding the problem of how we can simultaneously recognize knowledge as constructed, and yet understand how it accesses a reality not of our making, is to recognize, as Hilary Putnam does, that reality is multifaceted. He argues that a major problem with the approach taken by "traditional realists" –such as Berlin– is the assumption that the meaning of a word is a property of all things denoted by it. A second related problem is the assumption that one could ever delimit a totality of all objects and their properties: "reflection on human experience suggests that neither the form of all knowledge claims nor the ways in which they are responsible to reality is fixed once and for all in advance" (Putnam 1994: 449). According to this view, the idea of "nature's basic plan" makes little sense:

> Thus, quantum mechanics is a wonderful example of how with the development of knowledge our idea of what counts as even a possible object, and our idea of what counts as even a possible property are all subject to change. The traditional realist assumes that general names correspond more or less one-to-one to various properties of objects in some sense of 'property' and in some sense of 'object' which is fixed once and for all, and that knowledge claims are simply claims about the distribution of these "properties" over these "objects" (Putnam 1994: 451-452).[12]

Despite his criticism of the traditional realist position, Putnam is confident that we can know the world. The claim that we cannot, he shows, is linked to the problematic notion that there is some sort of entity in our mind that acts as an interface between the outside world and our inner selves, such that the only way we can access the world is through representations. Without denying that in many contexts people do construct representations (1994: 505) he states:

> the traditional claim that we must conceive of our sensory experiences as intermediaries between us and the world has no sound arguments to support it, and, worse, makes it impossible to see how persons can be in genuine cognitive contact with the world at all (1994: 454).

Instead of seeing humans as representing the world, then, we should see cognition as a form of engagement with the world

> The way out of the dilemma I would like to propose requires an appreciation of how sensory experiences are not passive affectations of an object called a "mind" but (for the most part) experiences of aspects of the world by a living being. Mind talk is not talk about an immaterial part of us, but rather is a way of describing the exercise of certain abilities we possess, abilities which supervene upon the activities of our brains and upon all our various transactions with the environment, but which do not have to be reductively explained using the vocabulary of physics and biology, or even the vocabulary of computer science (1994: 483).

Experience is one aspect of reality –it is neither a construction nor a representation– and it provides us with access to other facets of reality. As Bhaskar says, regarding the relationships between things and our experiences of them, "the relationship is not between a real and an imaginary object, but between two kinds of real object, one of which is very small" (Bhaskar 1998b: 43).

I find Putnam's approach attractive because it allows us to recognize a way in which ethnobiological knowledge can be "true" to the world precisely because it *cannot* fathom "nature's basic plan." A local attempt to make sense of nature is one among many ways of grappling with an emergent, multifaceted reality:

> what we recognize as the face of meaning is, in a number of fundamentally important cases, also the face of our natural cognitive relations to the world –the face of perceiving, of imagining, of expecting, of remembering, and so on– even though it is also the case that as language extends those natural cognitive relations to the world, it also transforms them. Our journey has brought us back to the familiar: truth is sometimes recognition transcendent because what goes on in the world is

> sometimes beyond our power to recognize, even when it is not beyond our power to conceive (Putnam 1994: 515-516).

**Biological Perspectivism**

How do the insights regarding the relationship between knowledge and the world apply to our understandings of how the Runa treat anomalous plants such as *Discocactus amazonicus* –the plant that sprouts from its leaves? In what sense do I mean that the Runa's observations about *D. amazonicus* are "true" to biological reality precisely because they do not conform to nature's basic plan?

Leaves cannot grow out of other leaves and must, instead, grow out of buds. The Runa, then, seem to be getting at a biological reality in their observation that this plant does not appear to conform to this "rule of nature." But the Runa perspective, although faithful to biology in a certain sense, only begins to fathom other levels of reality. What does this plant look like from other perspectives? An evolutionary biologist might point out that the Runa's reliance on morphological characteristics, without an understanding of how they evolved, leads them to see something as anomalous which, in fact, is not. The ancestral group within the cacti, from which *D. amazonicus* is derived, originally lost its leaves and developed succulent photosynthetic stems that were round. These changes reduced the surface area over which the plant could lose water and were adaptations to arid habitats in which light was not a limiting factor.

It might, at first, seem strange that cacti should be found in the rain forest because in this habitat rainfall is very high and there is much shading. For these reasons, in rain forests one will tend to find plants that are less efficient at storing water but more efficient at capturing sunlight. This trend explains the existence of enormous trees, such as the ceibas, whose crowns emerge above the shaded canopy or understory treelets with very wide planar branching designed to absorb the scarce light that filters down through the many-layered canopy.

Rain forest epiphytes, by contrast, do encounter a desiccating environment –albeit one not as arid as that of a desert. Because they are not rooted, these have no access to the water that stays

in the soil. Furthermore, in their high perches they are exposed to gusts of wind that also contribute to desiccation. Several plants have developed appropriate adaptations to fill this niche. Many genera of orchids have developed pseudobulbs at the base of their stems as a way to store water. Similarly, many bromeliads have developed a basal rosette of leaves in a pitcher-like structure that traps rainwater. Given the ability of cacti to withstand water stress, the desiccating microenvironment of the rain forest canopy is an ideal habitat for them.

Although the rainforest canopy microenvironment is quite dry, it is not as desiccating as the extremely arid habitats in which the cacti have evolved and radiated. Furthermore, light is still often a limiting factor in the canopy. *D. amazonicus* exhibits adaptations that have allowed it to face these conditions. Compared to tubular cacti, it has greatly increased its surface area; the stems have become laminar in order to capture light more efficiently. In this way it has traded water conservation efficiency for an increased ability to capture light.

Indeed, one could say that the stems of *D. amazonicus* have become "leaf-like." They are flattened structures designed to maximize the capture of energy from the sun. In this sense, they are very similar to the "true" dicotyledonous leaf. A major difference with "true" leaves, however, is that the "leaves" of *D. amazonicus* are actually derived from stems. Therefore, they can grow in an indeterminate fashion, like the branches of a tree; they can sprout from other "leaf-like" stems and, by doing so, they break no "rules" of nature because they are not true leaves.

This evolutionary perspective in which *D. amazonicus* can be understood raises the question of what we mean when we use the term "leaf." For example, according to some perspectives in evolutionary biology, monocots, such as bananas, do not have true leaves. They are descendent from an aquatic dicot ancestor that lost its leaves. This ancestor of the monocots retained only petioles to avoid the drag on leaves that the turbulent medium of water creates. All monocot "leaves," according to this theory, are secondarily derived from the petioles of this basal group. As such, they too are not true leaves. Unlike those of *D. amazonicus*, however, these laminar structures cannot sprout from other "leaves" because, like petioles in general, they too must

grow from buds. So, from an evolutionary perspective, the very concept of leaf becomes complicated. There are many ways of becoming a leaf, each one with different implications.

**Ecosemiotics**

There is another set of perspectives, one that is hardly considered in anthropology or philosophy, but one that is, nevertheless, extremely important to my argument. This set concerns the viewpoints of the organisms that comprise a natural system. Natural systems evolve and part of the way in which they change is based on how different kinds of beings in those systems perceive each other.

Humans do not just react to environments but also construct them through the ways in which they understand them. Such knowledge is intimately related to practice. For example, Balée (1989) and others have shown that the structure of the supposedly pristine forests of the Amazon has been greatly affected by humans and this impact may well have important evolutionary implications.

This capacity to affect the structure of "nature's plan" through perception and practice is not limited to humans, however. Animals also construct their environment through the ways in which they perceive them. Jakob von Uexküll (1982), an Estonian zoologist working in the early 20$^{th}$ century, developed an approach to the study of ecosystems that posited that the subjective world-views of organisms –and how, through these, they interact– should be the proper subject of ecology. His was a reaction to a behaviorist approach that tried to understand the interaction of organisms as a mechanical one among objects. Alf Hornborg (1998, 2001), inspired by, and expanding on, the work of von Uexküll, has dubbed this approach "ecosemiotics," for it views the fundamental units in the study of ecological interactions as ones of communication and meaning, and not of behavior.

When Bhaskar speaks of epistemology, he writes as if this category only applied to people. An ecosemiotic approach, by contrast, is also concerned with the ecological implications of

the ways in which other organisms come to know the world. Perception in some important ways is constitutive of the world. Ontology –how the world is– is shaped by these various meanings.

The ways in which such "meaning-worlds" overlap and interpenetrate can be seen, for example, by exploring some of the ways in which leafcutter ants (*Atta* spp.) –known simply as **añangu** (ant) in Ávila– are connected to other organisms in the forest. As von Uexküll writes, "The meaning of the forest is multiplied a thousandfold if its relationships are extended to animals, and not only limited to human beings" (1982: 29). An ecosemiotic approach to the ecological webs that link the ants to other beings in the ecosystem can reveal these "multiplied meanings."

Once a year each *Atta* colony produces enormous winged reproductive males and females that can be as long as 40 mm in length (Hogue 1993: 447). These emerge from the nests and take flight in order to mate with their homologues from other colonies throughout the forest. This event poses several questions that can all be understood ecosemiotically.

First, how do the various colonies manage to coordinate their flights so that all reproductives in a given region emerge on the same day and at the same time? To my knowledge, this has not been studied by biologists. According to the Runa, ants emerge shortly before dawn on a dry night immediately following a period of heavy rains that include thunder and lightning and the flooding of rivers. This takes place in late September, October, or sometimes as late as early November. It is possible that these various colonies are attuned to the same meteorological "signs" and can use these to coordinate their actions across colonies. This is one sense in which ecology is semiotic.

Second, a wide range of animals eats the emerging ants. How do these become aware of the presence of the flying ants? In Ávila, I made several collections of specimens of animals that were found in association with leafcutter ants at the time when the reproductives were emerging. These included the frog *Lithodytes lineatus* (**añangu caya mama**). According to Juanicu, "in places where there are leafcutters, [this frog] is never absent" ("**caran añangu tiascapi mana**

**illan**"). According to herpetologists, *L. lineatus* raises tadpoles inside *Atta* nests and also eats the ants (L. Coloma, personal communication 2000). The boa *Epicrates cenchria*, known as **baruchi**, was also found in association with these ants. The Runa feel that both this snake and *L. lineatus* live in their nests but do not eat them. During this season, the snake *Leptodeira annulata* (**jatun ñabi machacui**) was also found near a leafcutter nest. This snake, according to the Runa, does eat these ants. Finally, the margay (*Leopardus wiedii*), a small feline known in Ávila as **inchi puma** or **yura nigri**, was also killed by a man during this season as it was feeding on the reproductives emerging from a nest in the predawn ours of the morning of their flight. All of these animals are attuned to communicative or behavioral signs of the ants or of other animals that permit them, in turn, to know that the ants are emerging at a given moment.

Third, how do the ants manage to evade their predators? The predators mentioned above notwithstanding, there are two much more menacing kinds of organisms that these ants must contend with. The first are bats. The bat that most eats these, according to the Runa, is one they call **chiquiri** (unidentified). I have observed the **chiquiri** bats present in large numbers when the ants are emerging. They attack the reproductives in mid-air by biting off their greatly enlarged, fat-filled abdomen. Following these attacks, many leafcutter reproductives can be seen on the ground minus their abdominal sections but still alive. Birds are also major predators of these ants. The ants try to evade attacks from bats as well as birds by evading the subjective perceptual universe of these. Bats are nocturnal whereas birds are diurnal. It is no coincidence, then, that the ants always take flight shortly after five in the morning. Although the bats are still out, by this time they will only be active for twenty or thirty minutes longer. When the birds come out (not long after a six o'clock sunrise), the ants will have already dispersed and some females may have already copulated and fallen to the ground to establish new colonies.

Finally, the people in Ávila, like others all over Amazonia, also gather these ants. When toasted with salt they are considered a delicacy and, collected by the potful, they are also an important source of fat and protein during the limited time that they are available. How do peo-

ple predict the few minutes out of every year when these ants exit the nest and how can they then trap them before these take flight?

The Runa also see ecology as semiotic. In Chapters Four and Five, I will explore this in more detail. Here I wish only to briefly outline the ways in which the Runa attempt to "tap into" what they see as the various communicative worlds of natural forces and organisms that can signal the emergence of these ants and allow them to be captured.

The following organisms signal to the Runa the coming of the season when the leafcutter ants will fly (**añangu uras**), or, in some cases, more specifically, the exact day when the reproductives will emerge:

***Plants***

**shiquita** *Wettinia aequatorialis* (Arecaceae)
The leathery inflorescence sheaths (**huayaca, añangu huayaca**) of this palm fall from the tree when the ants will fly. This can be used as a container to gather and store ants.

**patihua** *Iriartea deltoidea* (Arecaceae)
The leathery inflorescence sheaths (**huayaca, añangu huayaca**) of this palm fall from the tree when the ants will fly. This can be used as a container to gather and store ants.

**mishqui cara muyu** *Symplocos arechea* (Symplocaceae)
This forest tree fruits during **añangu uras**.

**sara canuhua, añangu canuhua** *Arrabidaea* sp. (Bignoniaceae)
The sub-woody fruit capsules of this liana, after discharging their wind-dispersed seeds, fall to the ground during **añangu uras**. When the ants are toasted the hard, canoe-like tabular capsule is used to stir them.

**samuna** *Pachira* sp. (Bombacaceae)
The empty fruit capsules of this enormous tree fall to the ground during **añangu uras**.

**añangu caspi** *Triplaris dugandii* (Polygonaceae)
Wind-dispersed fruits of this understory tree fall to the ground during (or before, see Chapter Four) **añan-**

**gu uras**.

### *Invertebrates*

**yana dahuanu, mtuca**[13] (Tabanidae)
This horsefly becomes abundant during **añangu uras**.

**zima** *Megasoma acteon* (Scarabaeidae)
This enormous rhinoceros beetle becomes active during **añangu uras**. Some, however, disagree with this claim.

**añangu curu mama, indi curu mama, rupai curu mama** not identified
This beetle is found during **añangu uras**.

**cuica** *Martiodrilus* sp. ? (Glossoscolecidae)
This giant earthworm comes out of the ground especially when the ants are about to fly.

### *Fish*

**añangu huili** *Lebiasina* sp. (Lebiasinidae)
This small, elongated fish swims up flooded streams in the heavy rains preceding the leafcutter ant flight in order to lay eggs in muddy stream beds or in underwater leaf litter.

### *Frogs*

**ali jambutu** not identified
This frog lays eggs during **añangu uras**.

**bahui** *Eleutherodactylus peruvianus*
This frog calls **hua' hua'** after heavy rains indicating that the ants will fly.

**añangu diquiri** probably part of the species complex *Bufo "margaritifer"*
This large toad comes to small streams to lay eggs during **añangu uras**.

### *Birds*

**tsiji** black-faced hawk
The presence of this raptor indicates that the ants will soon fly.

**puca pahua** Spix's guan
This large game bird flaps its wings from its sleeping perch around four am to indicate that the ants will fly that dawn .

**yura pahua** common piping-guan
This large game bird also flaps its wings from its sleeping perch around four am to indicate that the ants will fly that dawn.

Many of the animals that the Runa link to the ants seem to be attuned to the elevated rainfall that immediately precedes the ant flight and that also brings an end to the relatively drier month of August known as **veranu uras** (summer, dry time). These include the aforementioned plants *Arrabidaea* sp. and *Triplaris dugandii* that take advantage of the drier months to disperse their seeds by wind. The spent capsules –or the fruits themselves in the case of *Triplaris*– are still visible in the wetter **añangu uras**. Regarding invertebrates, there is a general increase of mosquito and insect populations during the wetter months following **veranu**. The giant earthworm –prone to desiccation– takes advantage of the wet season to exit its burrows in order to mate (G. Onore, personal communication). The fish and frogs that are listed also seem to take advantage of the increased wetness of this season to lay eggs.

It is this change in meteorological conditions that constitutes the most important indicator for the Runa of when the ants will fly. If the appropriate conditions are repeated, the Runa say, ants can fly as many as five times from the nests in one season. If they are absent, they may not fly at all in a given year.

The Runa seem to feel that –although the already mentioned animal activities are useful signs that people can use to predict **añangu uras**– it is the weather that the ants are actually attuned to. As Sebastian explained to me, "when they hear the thunder/lightning they will go, if there is no thunder/lightning they won't go" ("**rayu oyapica ringa, rayu illapica mana rin**"). Accordingly, when such meteorological conditions exist, the Runa will go to the various nests around their houses several times throughout the night to check for the tell-tale signs that indicate

that the ants will soon take flight. These include the presence of guards clearing entrances of debris and sightings of a few slowly emerging, and still somewhat lethargic, reproductives.

The Runa also feel that they can communicate with the ants in order to influence them to come out at a given time. For example, one evening in **añangu uras**, just as the ants were about to fly, Juanicu asked me for a cigarette so that he could blow tobacco smoke infused with the power of his life-breath (**samai**, see Chapter Five) in order to send the impending rain clouds away. If it rained that evening, Juanicu felt, the ants would not emerge.

His wife Olga, however, urged him not to ward off the rain clouds. She feared that their two sons, who had gone to market, would not return from Loreto until the following day and she felt that all family members would be needed to man the various leafcutter nests that where near the house and in the surrounding forest. To make sure the ants would not fly that night, Olga chose a strategy of "direct communication"; she went, that evening, to all the aforementioned nests and stomped on them. This, she said, would keep the ants from coming out that evening.

Ants, it is thought, can also be enticed to build their nests in a particular location. People can call them by blowing over the extended wing of the **chiquiri** bat (its major predator) so that the membrane vibrates like a reed. It is said that in ancient times (**ñaupa tiempu**) there were no leaf-cutters in the relatively flat region (**pamba**) where Ávila is located. The ants are only present now because someone in those times enticed them to build nests by calling them using the bat's wing.

The Runa feel that, in general, the ants rely on calls from animals to find the location for their new nests. A kind of rove beetle (Staphylinidae), known as **añangu caya mama** (the ant-calling mother), is said to scout out new colony sites for leafcutter ants. When it finds a suitable place it communicates with them by calling, "**tin, tin, tin, tin**" in the evening and at dusk (see Chapter Four).[14] The frog mentioned earlier (*Lithodytes lineatus)* that has the same name, seems also to "speak the same language" (my phrase) to the ants. As its name indicates, it too is thought to call the ants to new nests. Furthermore, the Runa imitate its call in nearly the same way as that of the beetle: "**tyen tyen tyen**."

Runa attempts to penetrate the subjective "world view" of the ants extends also to the way they harvest them. On the night that Juanicu felt sure that the ants would finally fly, he urged me –before I went out with his children in the middle of the night to check the nests– *not* to kick or step heavily around the nest.

Then, shortly before five in the morning, at a distance of about four meters from the entrance of the nest closest to the house, Juanicu and I placed some lit kerosene lanterns as well as some of my candles and my flashlight. The reproductives are attracted to light and would be drawn to it. These sources were placed far enough away, however, so that the guards, with their vicious bites, would not consider these to be threatening.

As the ants began to emerge, Juanicu spoke only in whispers. Shortly after five we could hear a buzzing as the reproductives began to emerge from the nest and fly off. Many of these were fooled by the light and came to it instead of flying off.

Juanicu then began to whistle two alternating tones –like a siren– in order to attract the flying ants. This, he later explained, is understood by the flying ants as the call of their "mothers."[15] As the ants came to us, we singed off their wings with torches made of dry **lisan** leaves (*Carludovica palmata*, Cyclanthaceae).[16] We were then easily able to place them into pots that we could then cover.

The Runa's felt ability to communicate with the ants extends also to the period after they are trapped. Ants should never be eaten with hot peppers. Doing this will make the guards of the nests from which the ants were gathered much more aggressive (**millai**). Their bites –which draw blood, as I learned from personal experience– will become, like the sting of burning hot peppers, even more painful. Instead, the ants should be eaten with salt –a substance classified as sweet (**mishqui**, tasty, sweet, or salty)– so that they will become tame (**mansuyangapa**).

The various interactions that the Runa have with the ants can be seen as communicative across subjective planes. These include: 1) kicking, or not kicking, the nest 2) placing the light sources at a distance from the nest (the biting of the guards is itself a communicative act) 3) whis-

pering so as not to be heard by the ants 4) attracting the ants by means of the light 5) whistling to call them in, and finally 6) placing peppers or salt on the ants to be eaten, which can affect the behavior of the guards still in the nests.

The leafcutter ants are immersed within an ecosemiotic chain of subjective universes that has shaped their biology; the fact that the reproductives emerge just before dawn is clearly related to the perceptual abilities of their major predators. The Runa also attempt to tap into what they understand to be the communicative universe of myriad creatures connected to the ants as well as with the ants themselves. Such communicative attempts have practical effects; the Runa are able to gather vast quantities of ants based on them.

The ecosemiotic view that the Runa have of ecology allows them to arrive at a very good understanding of the various associations that link ants to other beings in the forest and to seasonal climatic conditions. The Runa can predict when these ants will fly with uncanny accuracy. Biologists, less inclined to trace these semiotic links, have been less successful.[17]

In my presentation of how leafcutters are embedded in an ecosemiotic universe, I have made little effort to distinguish, on the one hand, the Runa ideas of communicative strategies and subjective worlds of the various organisms from, on the other, what may be taken to be a more removed attempt to understand how these organisms perceive the world. The Runa understand ecosystems to be structured by semiotic connections and attempt to read signs in nature accordingly. Although it often overlaps, this is an analytically separate point from the claim that perception is central to ecology in ways that are not necessarily connected to humans.

Some biologists, concerned with understanding tropical ecology from an evolutionary perspective, have attempted to use this latter ecosemiotic approach (although not by that name) to try to understand how an organism perceives its environment and acts on that perception. In a remarkable paper, Dan Janzen (1988) questions the meaning of the idea of species diversity in a Costa Rican dry forest from the perspective of the squirrel cuckoo. Whereas, from the perspective of a taxonomist there are thirty species of saturniid moth caterpillars in this region, from the perspective

of this bird –which is a major predator of caterpillars– there are only three: those that can be mauled and eaten, which comprise five species; the urticating caterpillars that must be killed before being eaten, which comprise several genera; and finally, two species of caterpillars that resemble coral snakes and are therefore avoided altogether (cf. Von Uexküll 1982: 57). Which perspective is more true to biological reality, that of the biologist or that of the bird? The way in which the squirrel cuckoo perceives these caterpillars affects its levels of predation on these insects and therefore, through selective pressure, it changes the "basic plan" of nature. Similarly, what does it mean to question whether the laminar photosynthetic surfaces of *D. amazonicus* are leaves or stems? From the perspective of the plant, each is an equally effective means of capturing solar energy.

Recognizing that ethnobiological knowledge is dependent on the limited perspectives, interests, and abilities of the observer does not mean that this kind of knowledge is false. That the Runa recognize that *Discocactus amazonicus* is anomalous *does* say something important about the nature of the biological world. But it does so *precisely* because it cannot fully fathom nature's basic plan.

**Conclusion**

In this chapter I have tried to establish a framework that can address how local knowledge can access a biological reality that, in large part, is independent of people. I do this by trying to make sense of organisms that the Runa consider anomalous. I argue that applying Berlin's idea of a "basic plan of nature" to explain these anomalies reveals several important problems. These problems are inherent to his approach in particular and to realist and constructivist approaches more generally. I look to three other approaches as an alternative: the critical realism of Roy Bhaskar, the recent philosophical position of Hilary Putnam, and ecosemiotics. Elements of all of these can help explain how local environmental knowledge can access a world not of our making.

Bhaskar points to the various problematic conflations between epistemology and ontology that realist and constructivist approaches uphold; he feels that these two categories must be dis-

tinguished for knowledge to be possible. Furthermore, an awareness of an ontological category is possible, at a theoretical level, independent of our ability to know it through experience. This awareness of an independent ontology that informs experience but is always in some sense beyond it is crucial for understanding what knowledge is and what it is about. In addition, this view of the limitations of epistemology seems to conform to the Runa's own views about the relationship between their knowledge and the world. Their hesitation in using models should be kept in mind when studying folk ecological knowledge and cosmology.

Putnam holds that the problem regarding the relationship between knowledge and the world is a "non-problem." That is, it reflects a problem with how philosophers and other social theorists understand perception and reality and not with the nature of elements of the world that these categories purport to index; most people –including constructivist social theorists in their daily lives– do not doubt that we can know the world. Specifically, he feels that the problem lies with a naive realist view which posits that reality is unchanging and unitary. More important for the argument at hand, however, Putnam feels that the cognitive process of perception should not be seen as one of interface, and hence representation, but as a means of access to the world, even if it is an admittedly limited one. Such a view imbricates well with the Runa one, discussed in the previous chapter, which holds that language is a form of accessing and recreating experience and not just a means of representing or recounting it.

The insights of Bhaskar and Putnam allow me to say something about what Runa claims about morphologically anomalous plants mean. Specifically, they permit a framework in which these statements can be said to be true about a certain kind of biological reality even if they are also culturally and cognitively situated.

Bhaskar's approach, in particular, has some shortcomings when applied to ecology and these need to be addressed in order to understanding Runa nature knowing. In the case of a coevolving ecosystem, the stark division between ontology and epistemology that Bhaskar suggest is untenable. In some ways, these terms lose their meaning when applied to the problem of ecosys-

tems and the place of people, or other subjects, in it. Non-humans also have "epistemologies" in that they perceive the world in specific, situated, ways. These "forms of knowing" affect the way the world is by informing the manner in which these beings interact with other beings in the world; over evolutionary time the system is shaped by these interactions.

Ecosemiotics is an approach to ecology that captures this subject-dependent perceptual quality of natural systems. Although I introduce this concept in this chapter, for the moment I pay little attention to the particular forms that local ecosemiotic models take in Ávila. The three chapters that follow, by contrast, are in large part about the specific ways in which the Runa understand ecology to be semiotic. Runa understandings of nature are not just cultural constructions arbitrarily slapped on an unchanging objective world. Rather, I argue, such understandings need to be understood within the theoretical framework I propose in this chapter; they are culturally specific forms of understanding that are intimately commensurate with the world. They are primarily forms of access rather than forms of representation. As such they engage with a world "out there." The approach I have suggested in this chapter can suggest how they do this in a way that is culturally specific and locally situated but also responds to a biophysical environment and a multi-subjective universe.

# Chapter Three
# The Perspectival Aesthetic

## Introduction

I ended the previous chapter with a suggestion that point of view matters in biology. That is, that the subjective perspectives of different organisms affect the composition of that system we call, "nature." In addition, I suggested that looking at ecology and evolution with attention to the perspectives of different actors can reveal qualities of this system that an object-oriented approach might miss. As I mentioned, the Runa are also interested in understanding the subjective perspectives of other kinds of beings. This chapter constitutes an effort to understand their interest in point of view.

I argue that this Runa attempt to understand the perspectives of other organisms grows out of a practical concern that is associated with the everyday challenge of making sense of and tapping into a complex ecological system. It is my contention that through such interaction, a culturally specific "perspectival aesthetic" has emerged. This aesthetic is the product of the complex interaction between a natural world and people's cognitive and cultural attempts to make sense of it. It emerges, and is also visible, in moments of ecological engagement. Such an aesthetic, in turn, informs many aspects of Runa culture in ways that extend beyond ecological concerns.

How the Ávila Runa understand the perspectives from which different kinds of beings perceive the world is one element of an important pan-Amazonian cosmological model known as "perspectivism" that has been brilliantly analyzed by the anthropologist Eduardo Viveiros de Castro (1998). The model is based on two interlocking claims. First, all sentient beings, be they spirit, animal, or human, possess a human soul. They all see themselves as humans. That is, their subjective world-view is identical to the way the Runa see themselves. Second, although all beings see themselves as humans, the ways in which they are seen by other beings depends on the ontological make up of both observer and observed.

For example, some people in Ávila say that vultures see carrion as manioc. What from the Runa perspective appears as the putrefying stench of dead animals is detected by vultures as the sweet-smelling smoke of their wives' cooking fires. This model shows how different kinds of beings, in this case vultures, have the same dispositions, values, and culture as humans; from a subjective perspective, vultures eat manioc just like humans. It also highlights the ontological differences between humans and non-humans by showing how the subjective viewpoint of the vulture and the external viewpoint of the Runa—in this case regarding the nature of the food in question—vary.

Perspectivism is depicted in the ethnological literature as a *sui generis* cosmology, without attending to the moments or spaces in which it emerges or how it is employed in daily life. In Chapters Five through Seven, I explore several aspects of perspectivism-as-abstract-cosmology. My concern in those chapters is less with how that cosmology is tied to ecological aesthetics and more with how it relates to a variety of extra-local historical circumstances. By contrast, my goal in this chapter is to show how perspectivism is actually predicated upon an aesthetic orientation that stems from the practical ecological challenge of understanding interactions among different kinds of beings.

By focusing on a perspectival aesthetic –as opposed to perspectivism-as-cosmology– I wish to distinguish analytically between ecological aesthetics and the more abstract local models they engender. Such models are often mistakenly taken to be the proper unit of anthropological analysis. This, in my view, is evident in much of the literature on Amazonian cosmology. Rather than relying on understandings of native cosmology, especially as they can be gleaned from structured interviews, mythology and other formalized categories of thought, I am more concerned with how ecological models are employed in everyday life, how they are upheld, and when they are rejected. This can be understood, I argue, by tracing how they are derived from aesthetic orientations.

At a practical level, the Runa try to make sense of the natural world by attempting to imagine the various points of view of other organisms and how these perspectives interact. For exam-

ple, in describing how the giant anteater (**tamanuhua**) deceives the ants it eats, one man took delight in explaining to me how it adopts the perspective of ants in order to fool them; when the anteater sticks its tongue into ant nests, the ants, in turn, see this as a branch and, unsuspecting, they climb on it.

In their interactions with organisms, the Runa, in many ways, try to emulate the anteater. That is, they take advantage of their ability to capture the perspective of another organism in order to achieve their own ends. For example, the Runa make scarecrows by binding together in a cross two flattened pieces of balsa wood of equal length. They then decorate this by painting red and black stripes using achiote and charcoal respectively. They carve the top part to fashion a head and paint big eyes on it and they also sometimes insert hawk feathers at the ends of the lateral piece of wood. This is placed in cornfields to keep white-eyed parakeets (**sacala**) away. The elaborate fashion in which the Runa decorate this scarecrow constitutes an attempt to imagine what –from the parakeet's perspective– a raptor (**anga**) looks like. That these scarecrows are successful in keeping parakeets away –they are made from year to year in similar fashion– indicates that, through them, the Runa are able to capture something of what a raptor looks like to a parakeet.

A similar concern with the practical ramifications of how animals see the world is visible in other practices. For example, Ventura's father used to paint his hands a dark purple with the crushed fruits of **shangu** (*Renealmia* sp., Zingiberaceae) so that armored catfish (**carachama**, *Chaetostoma dermorynchon*, Loricariidae) would not notice them as he would submerge them underwater to try to grab the fish from underneath rocks and boulders in the river.

It is my contention that such ecological challenges of understanding how the anteater eats ants, or how to make a scarecrow that will scare parakeets, or how to fish fish without being recognized by them, requires an attentiveness to the points of view of other organisms. A sensitivity, and even empathy, for how other organisms perceive the world seems to be a cognitive prerequisite for any kind of ecological engagement with nature. Nonetheless, the need to understand how animals see the world, and the assumed cognitive propensities that this requires, are not suf-

ficient to explain the particular elements of the perspectival aesthetic that emerges in Ávila to deal with this challenge. Nor can these factors explain the specific qualities of a perspectival aesthetic or the ways in which it has permeated Ávila sensibilities. In the sections that follow, I try to capture how this aesthetic emerges through culturally specific way of engaging with nature and I also trace how it influences so many aspects of Runa lifeways.

**Mindfulness and Empathy**

The two most important ingredients that contribute to creating the perspectival aesthetic are mindfulness to experience and empathy to the experiences of others. In Chapter One, I discussed how what I called an "aesthetic of the immediate" emerged in contexts of poetic attempts to recreate forest experience. An important ramification of this aesthetic is the cultivation of a sense of awareness to exactly what one experiences. One way of doing this, I argued, is to heighten awareness to the situated, perspectival nature of perception, as opposed to the more abstract nature of reflection. When Maxi says the he saw a, "big old rump" instead of saying that he saw "a peccary," he is being mindful that his knowledge of this animal is situated; if he were seeing the animal from another vantage point, he would not have been able to describe it in the same fashion.

The perspectival aesthetic, however, goes beyond faithfulness to the situated nature of one's own perceptions; it also includes an empathy towards how other beings experience the world. Such empathy can be seen in a variety of situations. For example, listening to a tape of birdcalls and matching these with their illustrations, Juanicu identified the recorded call of the gray antwren as that of the bird known in Ávila as **pahua pishcu**. This bird can be easily called in and then shot by a hunter armed with a blowgun.[18] **Pahua pishcu** is one of many small birds known as **sasi pishcu** (diet birds) because it is thought that their non-aggressive nature makes them ideal food for the sick and convalescing. Juanicu noted that the members of this species are often found in pairs or sometimes in threes. After killing the first, another will invariably come and it is best to kill this

one as well. Otherwise it will suffer from sadness and wander around crying (**huacasa**).

Because of a similar sense of empathy towards how birds "feel," a man whose mother was lost in the forest and presumed dead (see Chapter Six) decided not to shoot a female marbled wood-quail (**mundira**) that we encountered, along with its chicks, in the forest one day. This man had a "very sad heart" ("**yapa llaqui shungu**") regarding his mother who he presumed dead, and decided not to shoot the hen because he did not want her chicks to become "orphaned" ("**huaccha**") like him. Such feelings of empathy, arising as they do from projections of human emotional qualities to other beings, are a necessary precondition for an ability to entertain the point of view of another being.

How the Runa connect empathy with point-of-view became evident to me from a comment that Oswaldo made after we returned quite late in the evening after a very successful hunt in which both he and his father managed to kill a peccary. Oswaldo and Ascencio were quite tired after carrying the peccaries on their backs for several hours. When we got to the house, Oswaldo, somewhat jokingly remarked, "we've come to make [the women] work" ("**trabachingapa shamunchi**"). What Oswaldo meant was that, although from the hunters' point of view the work was complete, the women in the house would now have to stay up much of the night butchering and then tending to the drying meat on the smoking racks. In a certain sense, then, hunting –when seen strictly from the perspective of women and the tasks they need to complete– is simply an activity that "makes work."

The attempt to imagine the world from the perspective of another being is central to how the Runa try to understand forest events. This is visible, for example, in a discussion that involves speculation about what happened to some dogs that, as it turned out, were killed by a jaguar. One day, I had made plans with Hilario, with whom I was staying, to walk the banks of the Achi Yacu so that I could map the toponyms with him. It had been quite dry lately so the other people who lived in the house and were home at the time –Hilario's wife Ameriga, his sister Luisa, and her step-daughter Delia, and a young boy name Ramun– decided to accompany us to fish from the

little streams that flow into the Achi Yacu using barbasco (**ambi**, **jambi** *Lonchocarpus utilis*, Fabaceae-Faboideae). To prepare for this trip, Hilario, Ameriga, Luisa, and Ramun went to harvest barbasco. These shrubs had been planted many years ago in Luisa's and Ameriga's gardens. The gardens hand long been abandoned and were now fallows interspersed with advanced secondary forest. The adults went their separate ways, each one harvesting barbasco in different fallows. Ramun accompanied Luisa. The family's three dogs followed their masters to these fallows. Barking excitedly, these then began to chase a coati,. They then suddenly fell silent. Hilario and his family returned home and shortly after one dog returned badly wounded and eventually died. We later went back to search for the other dogs. At the edge of the forest just beyond the fallows we discovered their bodies at the spot where they had been attacked by a jaguar. Throughout the day, everyone in the house tried to piece together what had happened and this event prompted tremendous speculation and dominated the conversation for the better part of three days and nights. I recorded much of this and I draw on this material extensively in this chapter as well as in Chapters Four and Five.

During one portion of the conversation, Luisa and Ameriga commented that they heard the dogs barking as if these had encountered a large game animal. They then heard their aggressive barking as if they were trying to attack it. The dogs' vocalizations suddenly switched to those made by dogs that had been bitten. After that, there was only silence. At one point, the women assumed that the dogs mistook a mountain lion (**puca puma**) for a red brocket deer. Both are of similar size and color. They differ, of course, in that the mountain lion is a predator of dogs, whereas the deer is the prey of dogs. In fact, just that week we had been eating the meat from a deer that was killed by this pack of dogs.

The women speculated that this recent event may have affected how the dogs misperceived this animal. The scenario that the women portray to explain the dogs' manifest and audible behavior (i.e., the barking) is derived from their interest in trying to understand the event from the point of view of the dogs:

LJ: **paicunaca chundarucucashina "canishun" yarinus- canga**
thinking it was like a red brocket deer, "let's bite it" they must have thought

DG: **upa upalla**
so stupid

AA: **imaraicuta mana yacha**
how is it that they didn't know?

**ima "yau yau yau" apinashina yarinusca**
how is it that they could think of [barking], "**yau yau yau**" [a vocalization typical of dogs that are about to attack game] as if they were going to attack it?

LJ: **snata ranunga ya atun imata carca nin**
that's how they'd react if they came across something big

**"chundarucuchu carca" yarcani**
[after hearing them barking] "was it a red brocket deer [they saw]?" I asked myself

*(with a hoarse voice)*

**hua hua hua hua hua hua hua hua hua**
[imitation of the barks of dogs following game]

**ya ya ya ya**
[imitation of the barks of the dogs about to attack]

**aya—i aya—i aya—i**
[imitation of the barks of the dogs that have been bitten and are in great pain]

**chillapita ña**
that's it, nothing more

[…]

**chimanda ishcaicunaca chu**
from then on, the two of them just fell silent

This exchange is almost exclusively concerned with trying to understand the dogs' thoughts (i.e., their viewpoints) that produced a certain behavior (barking). The women knew the dogs' behavioral responses –after all they had all heard them barking– what they did not know, however, was what it was that the dogs saw and thought that caused them to exhibit that behavior.

By trying to see what images (including misinterpreted ones) motivated the dogs to bark, these women were distinguishing between inner intentions and the outward behaviors these produce. What each bark meant was readily apparent to the women (see Chapter Five), what was less obvious, was what, from the dogs' perspectives, prompted them to bark in those ways.

Empathy has its advantages. It also has its limits and dangers. This can be seen by examining a fragment of an important Ávila myth. Portions of this myth will be analyzed in the last part of this chapter as well as in Chapter Six. This myth is about man-eating **juri juri** demons that attack a hunting party. These demons are then trapped high in their lairs in a large tree where they are eventually asphyxiated from the enormous quantities of burning pepper smoke that people throw into a fire they light around the tree. The myth explains why these demons persist to this day.

This is how a tree lizard, that was helping the Runa, was said to have described these demons up in the tree:

HJ: **ricugripica**
looking up

**macurushinashi jundaranun**
[the trunk] was full with what looked like night monkeys

AJ: **uctupi**
in the hollow?

HJ: **uctupi**
yes, in the hollow

**chi uraca juri juri mana yapa tiascamari**
in those days there weren't too many **juri juri** demons

•

**pimus jatun pimus casca nin**
in a standing trunk of dead wood

**chunchu yura shayasca**
a big trunk of **chunchu** [*Cedrelinga cateniformis*, Fabaceae-Mimosoideae] shot up to the sky

AJ: **ahuama**
up high?

HJ: **ahuám-**
yeah, up high

**macurushinallata ñabi muyui**
just like night monkeys with big eyeballs

**macuru imanata**
you know, like night monkeys

**-nallata muru**
[with black and white] streaked [faces], just like that

•

**muru ñahui– jundaranusca nin**
a bunch of mottled faces piled in there

**runaman cuindarca**
[the lizard] told the man

The image of **juri juri** demons looking down from a high trunk like night monkeys is extremely compelling for the Runa. Night monkeys (**macuru**, *Aotus* sp.) look something like lemurs. Being nocturnal, they are distinctive in the neotropical forests in that they combine the intelligence and inquisitiveness of primates with the enormous –almost humanoid– eyes of a primate adapted to seeing in the dark. They sleep in the standing dead trunks of palm trees (**pullu**). When hunters pass these potential lairs, they will often kick the trunk. If night monkeys are present these will scramble to the holes and peer down at the hunters –making eye contact with them for extended periods of time. The feeling of intersubjectivity, and even the possibility for empathy, that this moment of eye contact creates is what Hilario, in his story about the **juri juri**, seems to allude to and what makes the image of these demons so compelling. The empathy that such moments of intersubjectivity can generate, however, has its dangers; one of these demons is spared by a young Runa bachelor who wants to marry her and this act of compassion will have tragic consequences, as I will later explain.

**The Perspectival Aesthetic and Speech Style**

I argued in Chapter One that the Runa tend to see talk primarily as experience and less as a way to represent it. A logical corollary of this idea is that if talk is really seen as experience, then speaking need not necessarily take place in the context of social discourse. Just as a person can experience the forest by walking through its woods, so too can she re-experience it by talking about that experience to herself. Some older people in Ávila will actually talk to themselves in just this fashion. Ascencio, for example, would often verbally recreate hunting experiences when he was alone waiting in the forest, or, when off by himself at drinking parties, or while lying in bed. In fact, he and others sometimes "perform" an experience without worrying whether it is being heard by others.

Although this kind of private performance is relatively uncommon in Ávila, a related phenomenon occurs frequently; people will often perform narratives of forest experiences when they are in bed in the early morning after having had **huayusa**. Those in the house are free to listen from their own beds but they can also doze. Such circumstances do not require the presence of an individual interlocutor to engage the speaker. Normally, as is evident from the story I analyzed in Chapter One, such performances are organized in a manifestly dialogic fashion; a speaker will recreate an experience and a listener will affirm his or her attention by adding a phatic **hm**, **aha**, or **ya** at the appropriate pauses in the narrative. In the nocturnal performances, by contrast, no such phatic affirmation is necessary.

In Ávila, it seems, the primary power of language is thought to lie in its connection to the viewpoint and volition of the speaker, and not so much in how a message is received or whether it is received at all. I do not want to push this point too far. Of course speech in Ávila –as elsewhere– serves a primary function of communication. This function, however, is sometimes superseded, at least at a certain level, by an aesthetic orientation that treats speech as a very different kind of activity.

In Ávila, there is an important speech style, which I call "parallel talk," that combines an aesthetic focus on the "immediate" with one that emphasizes the perspectival. That is, this speech style is a logical outcome of the idea that talk is seen as a creation or recreation of experience and this emphasis is combined with a perspectival aesthetic that stresses the primacy of situated points of view. This style of speaking is quite common in Ávila. It involves multiple speakers (usually two, sometimes three) that are intimately related—usually a husband and wife or sometimes women of the same age that live together in a house (e.g., a woman and her sister-in-law). These speakers have all experienced the same event and parallel talk consists in the performed recreation of this event for a listener.

In this style of speech the various speakers simultaneously perform their experience of the event from their vantagepoint. There is no attempt, on the part of the speakers, to link their expe-

riences with those of the other speakers. Nor is there competition for primacy of voice. This kind of speech is not a form of argumentation. In fact, in order not to privilege one perspective over the other, the listener, for the most part, does not engage the speakers with phatic interjections. Instead of a "dialogic" co-construction of the narrative involving the dominant speaker and the interlocutor (Mannheim and Tedlock 1995), a very different kind of conversation emerges. Here, what unites the various speakers is their focus on a shared event and the fact that they simultaneously recreate it through verbal performance. There is a tacit understanding that each voice constitutes an equally valid but subjective and perspectival experience of the event. The presence of the interlocutor, "aligns" these various voices. "Dialogue," in parallel talk, emerges in the ways in which multiple perspectives can be united by an external "observer" into a multi-dimensional understanding. Parallel talk embraces a variety of perspectives and recognizes the situated nature of each. A textured (multi-dimensional) recreation of an event emerges through the ways in which these points of view play off of each other.

I became aware of parallel talk on one of my first trips to Ávila in 1992. A middle-aged couple had come to visit Hilario, with whom I was staying. This couple was originally from Ávila but had migrated to another Runa community on the Loreto-Coca road. One afternoon, while drinking manioc beer, the husband and wife began simultaneously to recount to me how their son had been in a bus that went off the road. Fortunately, this son was not seriously injured. The wife experienced this event as a tragedy-narrowly-averted, and accordingly, she was crying as she recounted it. The husband, on the other hand, thought of this experience as a kind of adventure, and his tone reflected this. The speakers made no attempt to reconcile their two viewpoints. Nor did they try to engage each other in dialogue, or even to pause to let only one person speak. Neither the husband nor the wife ever attempted to speak over the voice of the other. What tied the two strands of the narrative together was that they unfolded simultaneously and that they discussed the same event. Their thoughts only became part of a unified picture by virtue of the shared referent, on the one hand, and the listener, that could integrate these separate but inter-

secting flows, on the other.

Throughout subsequent fieldwork in Ávila I heard parallel talk on many occasions but only managed to make a few transcribable recordings. The following examples come from an ongoing discussion between Ameriga, her husband Hilario, Hilario's sister Luisa, and Luisa's stepdaughter Delia about the fate of their dogs presumed killed by the jaguar. They were recorded throughout the day at their house. The words of each speaker appear in columns with the initials at the top of each column. Dotted lines divide the columns from each other. A phrase in one column that is at the same height on the page as a phrase in another indicates that these are being spoken at the same time.

***Example One: Hearing the Dogs Bark***

Here Ameriga discusses how she was harvesting barbasco in a region of secondary forest near a stream where she had stopped to clean out and reset a fish trap that had been place in the water some time before. Hilario refers to the fact that he was just upstream, also looking for barbasco. Both simultaneously recreate what they heard when they were carrying out their respective activities:

| AA: | HJ: |
| --- | --- |
| **ismu huamitamalla satircanchi**<br>where we set up the old conical fish traps | **chi chillapi carca**<br>there, it was right there |
| | **chi ananima**<br>just above |
| | **mascasa**<br>searching |
| **ismu huamita churaca**<br>[where] the traps were placed | |

**cutinllamanda hua au**
again [barking] **hua au** [bark made when a dog has caught scent of an animal]

**uh a' a' ai**
[another kind of bark]

**nihualla**
barking like that

**co' au' "Cuqui" mana caparita yarcangui**
[hearing] **co' au'** [to Hilario] you didn't think to call out "Cuqui" [the oldest dog's name]

**chu**
silence

**runapas maipita caparinga**
where was the person that needed to call?

**chu**
silence

**chi urani**
just below

**yacuhua vichai**
across the stream

**chillapi**
right there

**chimanda urcu pambata ricus-**
from there looking at the mountain plain

**chillapi chunllayanurca**
right then, they became quiet

**ñuca**
I [heard]

**huao huao**
[the way dogs bark when confronting a jaguar]

**capariras- chi pamballat-**
barking [from the direction of] that plain

**alculla uyarirca “hua hua hua”**
only the dog was heard [barking] “**hua hua hua**”
[bark made when about to bite an animal]

***Example Two: Dead Dogs Curled Up in a Ball***

Later that same morning we went out to the region where the dogs were presumed attacked and there Delia found the bodies of the dogs. The following exchange took place after we returned. Here Ameriga wonders out loud how the dogs died. This prompts simultaneous or near-simultaneous recreations on the part of Ameriga, Delia, and Luisa of the impression that the bodies of the dead dogs made on them when they found them strewn in the forest:

AA: **ricu- alc- imanamata huañusca**
looking at them, how is it that the dogs died?

**chima uma**
one facing that way

**shuca caima**
another one this way

**chipuramallatami carca**
strewn next to each other in that fashion

DG:

**puñungapa sirisca shiná’**
lying down as if to sleep

**Cuquica siris-**
Cuqui lying down

**mundó’**
all curled up in a ball

LJ:

**puñungapa sirisca**
lying down to sleep

**shiná’**
just like that

**mundó’**
all curled up in a ball

**ñuca Puca Ñahui**
I [saw] Puca Ñahui

**cai umama**
facing this way

**puñu-**
sleeping

**puñurashiná'**
just like sleeping

•

DG: -**na ricus- shayarcani**
just like that, I just stood watching

AA: **ña chi canpacha ña chi rictutami rirá'- yarca-**
yeah, you just went right to [the bodies]

DG**: "imata ricuni" nircani**
"what am I seeing?" I thought

**huashani ricup-**
slightly further I saw

**maquishina**
like a paw

**ricuri**
becoming visible

**asta ricusa**
searching a bit more

**chimanda ricuni**
then I saw it

**Pucá' sirin**
Puca extended

**“causachu” yani**
“is she alive?” I thought

***Example Three: The Antbird***

This final example comes from the same conversation as Example Two cited above. A spot winged antbird (**chiriquihua**) had been heard by Delia where she found the dogs and she asked whether the others had heard it when they were in the same region at the time when the jaguar had killed the dogs. This bird is easily scared by jaguars and thus serves as an indicator that people can use to determine the presence of these animals (see Chapter Four). Delia’s question prompted Hilario and Ameriga to simultaneously recount where they were when they heard the bird call and, in Hilario’s case, what he would have done if he had seen the jaguar that caused the bird to become frightened:

DG: **chiriquihua manachu uyarirca**
Did you hear the spot winged antbird?

HJ:

**ah ah ñucaca**
yes, I [heard it]

**piñaris- purirap-**
[and] angered [by it], if [that jaguar] was wandering around

**tupasa balihuanma nisahua ricusa purira-**
If I found [that jaguar] I would have shot it

AA:

**sn- -arca chi yacu uranishtupi**
yes, that’s how it was, just down that stream a bit

**chi**
there

**mana**
no

This moment of parallel talk is followed by parallel talk by Ameriga, Delia, and Luisa (Ameriga’s last phrase above is followed immediately by the phrase she utters which is transcribed below).

All of the speakers reflect on where they were and how they experienced the call of this bird. Delia is referring to the bird as she heard it when she found the dead dogs. Ameriga and Luisa refer to hearing this bird when the dogs were actually being attacked:

AA:

**chi pugru**
in that ravine

**ñucanchi pambascamanda**
from where we buried [the dogs]

**shina manchararinga**
that's how it gets scared

**runata ricusa**
[even] seeing a person

**manchana**
[it is] frightened

**"chiriquihua**
[calling] "**chiriquihua"**

**chiriquihua" nin**
it says "**chiriquihua"**

**"quihua"**
[calling] **"quihua"**

**imachari**
what might it mean?

DG:

**alcuca alcu**
the dog[s]

**huañuscamanda**
from the place where [they died]

**chistuma'**
right there

**-shtuma'**
there

LJ:

**paririhua paririhua**
[from] heliconia [to] heliconia

**shuma' shuma'**
[abruptly, as represented by the stopped final vowels] from one [plant] to the other

"**chiriqui' chiriqui'**"
[nervously calling] "**chiriqui' chiriqui**'"

**chi uyararca**
that's what I heard

| | |
|---|---|
| **caspi paquiris-**<br>**carca**<br>it was in the area of<br>the tree fall | **ari**<br>yes |

**Perspectivism and Everyday Aesthetics**

A perspectival aesthetic also permeates Runa sense of humor. This is evident, for instance, in a myth that explains why the Amazon bamboo rat (*Dactylomys dactylinus*) has such a loud call. It is said that this animal once asked a fallen log what women's privates look like from its vantagepoint. Since such logs constitute the preferred causeways that women use to traverse their gardens (see Descola 1996a: 157), the rat figured that the log was in a privileged position to know this. Alluding to the rat's abundant whiskers, the log responded, "like your mouth" ("**camba shimicuinta"**). Hearing this, the rat responded, "oh stop" ("**saqui su**") and then exploded in the bawdy laughter that is now associated with its distinctive loud, long, and seemingly uncontrollable staccato call (see Emmons 1990: 225) as well as its onomatopoeic name **gunguta**. The humor in this myth for people in Ávila is as much about the sexually explicit reference as it is about the perspectival logic. People are not normally able to entertain a perspective that would allow them to see underneath a woman's dress. The log enjoys a privileged vantagepoint in this regard.

Another common form of perspectival joking in Ávila, as well as in other Runa communities, occurs when two people share the same name. People that share names in this manner are also thought to share other attributes. They can assume the perspective of the other person with the same name. So, for example, because my first name is the same as Eduardo Siquigua's, the running joke was that his wife Salvina was my wife. (She was already a grandmother so this form of flirtatious joking was not seen to be threatening. Such jokes would not be made with young, recently married women.) For this same reason Eduardo's older sister jokingly addressed me as **turi** (sister's brother) and I addressed her as **pani** (brother's sister). Similarly, my sister's middle name is Louise, so, Luisa Jipa also began to address me as **turi**. Because my mother's name is

Anna Rosa, Rosa Tusupa would address me as **churi** (son). In all of these cases, shared names allow people to inhabit the world from the perspective of the person with whom they have the name in common. In the cases in which people addressed me as brother or son, this soon ceased to be a joke and instead it became the basis for expressing what I felt to be a profound and mutual sense of affection.

The perspectival aesthetic is also what makes so many mythic images compelling. This is evident in a fragment of a myth that describes how a culture hero traps a man-eating jaguar. The culture hero is on top of his roof patching it. When the jaguar approaches, the hero calls out to him saying, "son-in-law help me find holes in the thatch by poking a stick through them." From the vantagepoint of someone inside a house it is quite easy to spot leaks in the thatch because rays of sunlight can be seen to shine through them. However, because the roof is so high, it is impossible, from this position, to patch these. A person on the roof, on the other hand, can easily patch leaks but, from his perspective, cannot see the holes. For this reason, when a man is patching his roof he will ask someone inside to poke a stick through the holes. This action unites inside and outside perspectives; what can only be seen from the inside suddenly becomes visible from the outside. Because the culture hero addresses the jaguar as son-in-law, the jaguar is obligated to fulfill the role he would have if he were in fact related to the hero in this way. By obligating the jaguar to adopt the perspective of son-in-law-inside-the-house the culture hero is able to lure him inside and trap him; he slams shut the door to the house and transforms the entire structure into stone.

A perspectival aesthetic is also used to understand people's experience of landscape. Discussing people's situated experiences of time and space makes up a large portion of everyday small talk in Ávila. For example, one afternoon as rain clouds were rapidly advancing towards us from the foothills of the Sumaco Volcano to the northwest, Hilario remarked, "it's going to rain again, [by now] it's already raining by Ascencio's house" ("**cutin tamian, Ascenciopaman tamian**"). Ascencio lived about a kilometer northwest of our location. Hilario took interest in the fact

that he could predict that Ascencio was experiencing rain. That is, from the perspective of Ascencio, and his particular position in the landscape, it was raining.

Similarly, a very common topic of discussion when people are relaxing –say, when they are drinking manioc beer– is to comment on the progress of a person that has just left the house and is headed for some destination. Periodically, someone will invariably remark that the traveler must now be at the top of a particular hill, or fording a specific stream, or passing some other salient landmark. What is interesting to the Runa is imagining the point of view of this person –how the landscape features appear through his or her eyes.

**The Inculcation of Perspectivism**

A perspectival aesthetic permeates the world of children as well. One domain in which this is evident is regarding food taboos. Such taboos are common in Ávila. Most involve prohibitions against eating certain fish from the large rivers or particular forest animals when one is sick or convalescing. There is also a "perspectival" counterpart to these in taboos directed at children. These include prohibitions against eating a small water snail, known as **timu churu**, which is found in creeks. This snail is much smaller than the regularly-eaten water snail known as **yacu churu**. Accordingly, it is thought that if children eat it, their growth will be stunted. Adults, however, can eat this snail. Similarly, a crab known as **cunguri mucu nana pangura** (Pseudo-Thelphusidae?) is to be avoided by children because it is thought that if they eat it their knees will hurt when they get old. Older people, however, can eat this crab without ill effect.

These tabooed organisms are found in small creeks (**yacu huahua**, literally, the "baby rivers"). Youngsters are often allowed to carry out child equivalents of hunting, gathering, and fishing in these creeks. Even children that are seven or eight will go out with a diesel wick lantern (**vila puru**) at night to the nearby creek that their family uses for collecting drinking water and washing so that they can "hunt" crayfish, snails, and crabs. During the day these children may walk the same streambed well into the forest in order to fish and collect snails. Children cook the

resources gathered in this fashion. They sometimes also distribute these to the family in the same way that a mother serves everyone the food she cooks.

These collecting activities certainly pose specific dangers to children. Foremost among these is the possibility of being bitten by the fer-de-lance (**ardilla machacui**, *Bothrops atrox*). Indiscriminately eating tabooed foods is another danger. Nevertheless, the streams are considered relatively safe. It is impossible to get lost; one need only follow the stream back to the house. Also, these bodies of water are so shallow that drowning is not a concern. In short, these "baby rivers" are perspectival equivalents of the forests and rivers where adults hunt and fish. These creeks provide resources and pose dangers and challenges that have adult equivalents in the domains of the rivers and forests. That these creeks also contain organisms that, if eaten, pose dangers only to children, reinforces my argument that this space is thought of as a child's equivalent of the forests and rivers that house organisms that are taboo for some adults.

There may be as many parallel worlds in the forest as there are kinds of beings to perceive them. The creek, as seen through the eyes of a child, is one such parallel world. I will have occasion to discuss in detail the parallel world of the mountain forest, as opposed to the Ávila area forests, as revealed by bird classification (Chapter Four), the parallel world of the dead (Chapters Five and Seven), as well as the parallel world of the game masters (especially Chapter Six). These various worlds share certain features in common. They are all defined by attention to the particular perspective from which a particular kind of being sees things and how this viewpoint is 1) conditioned by the ontological status of the kind of being in question and 2) how it is related to the "normal" way that the (adult) Runa see the world.

Children in Ávila acquire a perspectival aesthetic at an early age. This is evident in the jokes they make. For instance, Edgar, a very bright young boy, joked that he would like to marry a certain young girl that lived nearby so that she could cook the small fry that he fished out of the little streams and serve him **chucula** –a sweet banana gruel favored by kids. From a child's perspective, small fry and **chucula** are equivalents, respectively, of the game meat brought home by

adult hunters and the manioc beer prepared by their wives.

Another boy's comment offers an additional example of how children joke perspectivally. When it was feared that a jaguar had killed the hunting dogs at Hilario's house, Ramón, a boy who was staying with us, called out one of the dog's names and then commented, "whoops, I just called that one that has already turned into [the jaguar's] excrement" ("**mashti, isma tucujtami cayarani**"). The absurdity of this black humor lies in imagining the perspective of a dog that is being digested in the bowels of its predator.

**Perspectivism and Reflexivity**

The emphasis on imagining how the world is seen through the eyes of another being can also be used to reflect on the Self. People are interested in what can be learned from the ways in which they are seen from an outside perspective. The ability (or inability) to imagine the plight of another can be a cause for a certain kind of mindfulness of Self. Luisa, for example, chiding herself for daydreaming at the time when the jaguar was killing her dogs, reflected:

LJ: **cai shuman yarí—sama tiarcani**
here I was just thi—nking of another

**"Marinapamachu rina imata" nisám-**
thinking, "should I go to Marina's or what"?

**shuman yarisa**
thinking of elsewhere

AA: **mhm**

•

LJ: "**chiman risác-**
"in order to go there

**shurai'**
I'll just quickly

**bata churasha**
put on a dress

**mana ali chura cambiaripa tucuni" nisa**
but I no longer have a good dress to change into," I thought

Although she is self-critical for not being attentive to the plight of the dogs, a kind of perspectival mindfulness is evident in that she can use this event to recollect the exact thought that passed through her mind at that moment. She can juxtapose the (unstated) experience of the dogs with the trivial thoughts in her own mind at the moment they were killed.

Because the jaguar that killed the dogs had undoubtedly been watching the women as they frequented their supposedly private gardens and fallows, Ameriga, Delia, and Luisa were outraged. They felt that the presence of the jaguar in the very personal domestic sphere of the garden to be an invasion of their privacy:

AA: **caipica mana yachariscamanda**
not being used to [jaguars around] here

DG: **runalla puriras cangami**
[jaguars] are supposed [to be absent in places] frequented only by people

AA: **ima rucupachapas**
what kind of beast [is wandering around here]?

**huasi mau- rimanamanda**
speaking of the house fallow

**ishpáratapas u' uyarilla**
[the jaguar is probably] just listening to those [women] that are urinating

**ishparascacunataca pumaca puriran**
the jaguar is just walking around where [the women] have urinated

LJ: **shinata**
that's how it is

**sna mana valica**
like that, it's no good

**puringata ninica**
[for a jaguar] to wander around

**Sunu patata illanchu nini**
are there no ridges at the banks of the Suno, I ask?

**patacunataca**
on ridges like that

**casnagunama** [inaudible]
those are [the appropriate places for jaguars to wander]

AA: **ari sachaman capi imatas**
yeah, [if the jaguar] would have [only stayed] in the forest, nothing would have happened

**mashullahuama yarcanchi**
we thought [the dogs had only scrapped] with the little coatis

•

**chita mashuca ciertu mauca pambat-**
those coatis, sure [they normally frequent] the flat fallows [as opposed to the forested mountain ridges]

**mascasa** [inaudible]
looking [for food]

Gardens are among the most private spaces. This is where women go to be alone. Furthermore, the Runa are very prudish about bodily functions. For example, women, especially, will try to avoid letting on that they are leaving the house to urinate and they try to time things so that they can take care of such needs when they are in their gardens. The thought that the jaguar may have been watching them undetected as they urinate is therefore very discomforting. Such a thought is very perspectival as well as reflexive; it involves imagining how one is seen in a very private moment through the eyes of another being.

Ávila myths push reflexive perspectivism to its logical extreme. Several myth images explore how perspectivism can reveal moments of alienation and the breakdown of self-knowledge. This is evident in the myth regarding **juri juri** demons that I have discussed earlier in this chapter and that I will have a chance to analyze more fully in Chapter Six. Here I want to discuss two images as they pertain to the relation between perspectivism, the break down of self-knowledge, and alienation. This myth begins with an episode in which ten hunters make fun of the monkeys they have hunted and are punished for this by the **juri juri** demon. This demon eats their eyes out while they are sleeping. Only one hunter refrained from making fun of the game animals. Because of this, he was spared from being blinded:

HJ: **huasha causarisa**
and later, when they awoke

(*with anguish*)

**“huao”**
“wow”

**“ima tucunchi ñuca ñabi”**
“what happened to us? and what happened to our eyes?”

**“casna tucunga” nin**
“that’s what happens,” he replied [i.e., when you show disrespect for the **juri juri** demons and the animals they control]

AJ: **ha**

(*with anguish*)

HJ: **“huao”**
“wow”

**“camba shinallatachu cangui”**
[the hunters asked the man that was spared:] “are your [eyes] like that too?”

**“tucui -na tucunchi” nisca**
“yes, we’ve all become just like that,” he said

**chi ñabiyu runa**
that man [still] with eyes [then said,]

AJ: **ha**

HJ: **“tucuimi shina tucunchi nisc-”**
“we’ve  all become [blind] just like that”

**imánata**
how is it?

**cuin-**
[that he could] tell [i.e., such a blatant lie like that]?

•

**“punjachu” nisca**
“is it daytime?” they then asked

(*haltingly*)

**“eh mana”**
[the man with sight replied:] “well, uh, no”

**“eh ñabi”**
“uh, [my] eyes”

**“illami tucunchu”**
“I’ve lost them too”

**“um, mana yachanichu”**
“uh, I don’t know”

AJ: **hm**

HJ: **chi runaca nisca**
that man said

**huasha gustu punja tucusca nin**
then the day became nice and sunny

**ali**
a good day

AJ: **ha**

HJ: **indi**
the sun

**chiu$^{h}$**
was shining bright

**gustu ali** […]
beautiful and good

The perspectival quality of this sequence lies in inviting the listener to imagine that a person that had become blinded (but did not know it) would experience a sunny day as if it were night. This is an image of alienation because these men do not know that they are blind and have only their experience of darkness. The man that was spared acts as an ambivalent translator between the perspective of a normal person, who can tell it is a sunny day, and the blinded men who cannot and, for this reason, do not even know that this man is lying to them.

With the help of the tree lizard, the man still with sight, along with other Runa, is able to smoke out the **juri juri** demons from the tree trunk where they are hiding. One female **juri juri** fell to the ground and assumed the form of a beautiful woman (**sumac huarmi**). She had a pretty face and, "there was nothing bad to say about her" ("**mana imapas rimaipa huarmi**"). A bachelor took pity and, convinced of her good nature, married her. This soon proved disastrous. She began to secretly eat their children by sucking their brains out from the crown of their heads while bathing them. Ameriga, when listening to Hilario, imagined this as, "[She must have] sucked [the brains out with a] **tso tso** [sound symbolic adverb imitating the activity of sucking]" ("**tso tso chup' chupanga**"). One day, the husband awoke from a magically induced sleep tormented by lice. He innocently asked his wife to pick them out of his hair:

HJ: **"usa" nirca**
"lice," he said

**"usátaga**
"the lice

**umami yapa shicshihuan" nisa**
are itching me terribly

[…]

**“llangahuai” nis-**
please go through my [hair],”

AJ: **hm**

“**canchaman llucshi**
[his demonic wife replied] “come outside

**ricus- apish-”**
I’ll have a look and pull them out”

(*each of the following three phrases with rising intonation and in clipped sucession indicating innocent, purposeful activity)*

**api shiná**
[and then] as if [she was] getting [them]

**api shiná**
as if [she was] getting [them]

**apíshna nin**
as if [she was] getting [them]

(*voice lowered to indicate the ominous act that had in fact taken place*)

**cunga tulluta**
[but then] when his neck

**cai rupa— tucup-**
became bu—rning hot

(*innocently, with rising voice similar to that used above, oblivious to the danger*)

"**yahuaru—n**
"I'm ble—ding

**caiman**
it would seem that

**chu- chugriscami cani"**
I'm wou- wounded"

AJ: **ha**

HJ: **tianusca** (?)
the two just stayed put

**sna ripi**
and then

(*with little emotion*)

**"mana can micuhuangui" nisca**
the man continued, "no, [I'm not merely wounded, rather] you are eating me,"

AJ: **ha**

HJ: **"saquihuai" nis-**
"leave me be," he said

•

**snalla nita**
[even though] he said that

**mana mana piñas- imapas**
it wasn't like he was angry or anything

**snalla**
just like that [i.e., he merely stated a fact]

AJ: **ah a–h**

•

HJ: **chimanda**
then

•

**huasha cu-**
later

**puñusca**
he slept

**imanapas puñunusca**
[I don't know] how they did it [but] they slept

•

**pundata**
and from the beginning

**huañujta puñuchi-**
[she] made him sleep to his death

AJ: **hm**

It seems that the Ávila Runa take particular delight in exploring perspectivally the form of alienation this man suffers. The man is punished for marrying a demonic wife. He is eaten alive but is not able to experience this from a subjective perspective. Instead, he can only experience it from an external one. He can only logically deduce that he is wounded, and then that he is being eaten alive, by the physical effects that this action produces. He feels no pain; he just feels his neck burn. Only later does he come to the realization that this is caused by his own blood that was flowing down from his head. The demonic wife causes him to experience his death in a completely objective fashion from an external perspective. The dangers of being able to adopt some points of view, then, include losing any kind of subjective human understanding upon which empathy is ultimately based (see also Chapter Five).

That perspectivism can be used to "step out" of human ways of doing things is something that the Runa enjoy. For example, some people jokingly refer to edible leafcutter ants (see Chapter Two) as **runa jiji** (people crickets). Crickets are the quintessential insect food of animals –especially monkeys. When people eat ants –whole, and sometimes even raw, crunchy exoskeleton and all– they resemble monkeys eating crickets. Here, the perspectival interest is not so much to show how animals partake in an essential human culture (see Chapter Five), but how people can sometimes step out of culture, so to speak, to take on the qualities of other beings.

I began this chapter with a vulture example, so it is fitting that I should end this final section on reflexivity with another. Like the aforementioned joke, this also refers to the animal-like food that people sometimes eat. Many species of forest and cultivated trees belonging to the genus *Inga* (Fabaceae-Mimosoideae) are called **pacai** in Quichua. They produce edible fruits that can be pulled down off the tree and eaten. The flesh surrounding the seeds is fluffy, white, watery, and sweet. Another legume in the same sub-family, (*Parkia balslevii*, Fabaceae-Mimosoideae) superficially resembles **pacai** in the shape of its fruits. The fruits of this tree are also edible, but its branches are very high and the fruits cannot be reached. Instead, they fall to the ground and rot. The flesh becomes brown and syrupy and resembles an off-flavored molasses in taste and

appearance. This tree is referred to as **illahuanga pacai**—the vulture's **pacai**. From the perspective of vultures, rotting food is sweet; when the Runa eat vulture **pacai,** they too are adopting the point of view of a vulture; they too enjoy rotting fruit as if it were fresh. Thinking about this fruit can provide an opportunity for the Runa to reflect on what is distinctive about their ecological position as eaters of fresh fruit. That they sometimes can enjoy rotting fruit provides an opportunity to reflect on different kinds of ontological categories and the possibility, for a moment, to switch back and forth between them.

**Conclusion**

Perspectivism tends to be treated in Amazonian ethnology as a *sui generis* cosmology. In this chapter, by contrast, I have argued that such a cosmology grows out of a pervasive aesthetic that is intimately connected to specific existential and practical ecological challenges.

My insistence on distinguishing, for analytical purposes, between a perspectival aesthetic orientation, on the one hand, and a perspectival model, on the other, is important for a number of reasons. Aesthetics are less removed from experience than models. Therefore, such a concept can permit us to see how an orientation can grow out of everyday activities and challenges. The aesthetic orientation that I have labeled, "perspectival," I argue, is one possible response to the universal human problem of intersubjective and –in the case of hunting, transpecific– empathy. As I have shown, such an aesthetic permeates everyday sensibilities and also has ramifications that go beyond narrowly defined ecological concerns.

The distinction between an aesthetic orientation and a model is also crucial for understanding how the Runa (and others) can engage in acts of knowing that they consider to be interesting. Knowing, as I have argued, is about reaching beyond the frontiers of the obvious (see Chapter One). The view of a model as a seamless, culturally constructed representation of the world reproduces the insurmountable divide between ontology and epistemology that Bhaskar and others find so problematic regarding constructivist and realist approaches to the question of

the relationship between knowledge and the world (see Chapter Two). An aesthetic, by contrast, is more a means of access than a form of representation. Using it –rather than models– as the locus of how people understand the world can help give a sense of how people, "can be in genuine cognitive contact with the world" as I quoted Putnam as saying in Chapter Two.

Also, a distinction between aesthetics and models permits a view of nature knowing that is at once closely linked to fundamental ecological challenges but also removed from these. People in Ávila seem to have a sense of critical distance regarding their models. The Runa, for example, are aware of the limits of their ability to know and they struggle to make sense of the unknown (see Chapters Two and Five). That this is so, would not be evident from a focus on knowledge as growing out of a cosmology or model to be dogmatically upheld at all costs.

As Eduardo Viveiros de Castro (1998: 478) has written: "A perspective is not a representation because representations are a property of the mind or spirit, whereas the point of view is located in the body." In this chapter I hope to have shown that the kind of empathy that perspectivism engenders is a means of access. The Runa concern is less with representing how other beings think and more with attempting to entertain the perspectives of these beings in order to act on that empathy. In this sense, the Runa emphasis on perspective embodies the more general concept of aesthetic that is the focus of so much of the first half of this dissertation. That is, the analytical category "aesthetic" attempts to capture how knowing nature is comprised of embodied orientations. Because "point of view is located in the body" the Ávila perspectival aesthetic is a local instantiation of the kind of knowledge that the analytical category aesthetic attempts to capture.

# Chapter Four
# Ecosemiotics and Metaphoric Ecology

## Introduction

Ecology can be defined broadly as the study of the relationships among beings and other elements of the biota in the environment. This chapter is about how such relationships are understood in Ávila. As I mentioned at the end of Chapter Two, although most western biology treats ecology as the study of the relationships among organisms that are thought of as law-governed and mechanically interacting objects, an ecosemiotic approach, by contrast, is concerned with looking at ecology as the study of relationships among organisms that are thought of as different kinds of communicating subjects.

The first part of this chapter discusses Ávila ecosemiotic notions in general. The second focuses more specifically on how and why the use of metaphor is so important to Runa ecosemiotics. A thread that weaves through the entire chapter is my interest in seeing how ecosemiotic connections are seen to have force. That is, the Runa are not content merely to describe ecological relations; they also want to understand the causal power such relations can have as well as how they can harness these ecosemiotic links in order to direct ecological relations to their own benefit.

Much of what I discuss in this chapter might fit under the rubric “magic” in that it forms part of an attempt to harness words and thoughts to achieve practical ends (cf. Brown 1984, 1986). Yet, for my purposes magic is a limited lens. The Runa see communicative links as structuring a variety of ecological relationships; not only those that involve people’s attempts to act on the world. Magic only pertains to techniques that people use to relate to the world. It does not account for the ways in which the Runa see their communicative acts to be part of a larger ecological system.

**Ecosemiotics**

The Runa attempt to understand the communicative acts that take place between different kinds of animals. For example, the golden-winged tody-flycatcher (**tulla tulla**) is also sometimes referred to as **sicu mama** (mother of agoutis) because it often is found at dawn in or near manioc gardens. From these, it calls agoutis (**sicu**). Because of its abilities to communicate with the agouti, this bird is considered **sabiru** (wise, from the Spanish, *sabido*). For this same ability, it is also despised; the **tulla tulla** is considered "no good" (**mana vali**) because the agoutis that it calls to the gardens are major crop pests.

Relations of communication, such as that between this tody-flycatcher and the agouti are exploited by the Runa. Men sometimes erect hunting blinds beside manioc fields so that they can hunt the agoutis these birds attract with their calls. Another bird, a tyrannulet,[19] that, like the tody-flycatcher is also a member of the tyrant flycatcher family, is considered to have the same propensities. It is found in montane forests west of Ávila and, accordingly, it is known as **urcu tulla tulla** or **urcu sicu caya** (mountain agouti caller) because it attracts agoutis by "calling them as if it was their mother" ("**mamacuinta cayan**"). By attracting an agouti to his hunting blind by means of its call, this bird once helped Ventura get meat –it once "gave me a little," he told me ("**ansa carahuan**").

Identifying specific birdcalls allows the Runa to detect the presence of animals in the forest. For example, the wing-barred manakin[20] is known as **indillama pishcu** (sloth bird) in Ávila because its call indicates the presence of sloths. Its vocalization is interpreted to mean, "the old grandmother [a euphemism for the white-haired and lethargic sloth] is hanging [nearby]" ("**aularucu huamburan**"). Juanicu once actually saw a sloth after hearing this bird call. Similarly, some people refer to the Amazonian antshrike as **puma pishcu** (jaguar bird) because its call alerts people to the presence of a jaguar.

The activities of some animals –rather than their volitional communicative acts such as calls– can also be understood, at times, as signs. This is true of the spot-winged antbird (**chiriqui-**

**hua**), mentioned in my discussion of parallel talk in the previous chapter (see Example Three: The Antbird). Animals, especially jaguars, easily frighten this bird, and its skittish behavior as well as its vocalization can be used as a sign that a feline is present. Another example of this phenomenon can be seen with **sicu mama**, a dung beetle (specimens include *Dichotomius* sp. and *Sulcophanaeus velutinus*, both Scarabaeidae) that feeds specifically on the excrement of agoutis. When it flies it makes a distinctive buzz, imitated as **tsi–**, that is readily identifiable by hunters and indicates the presence of agoutis. Similarly, a kind of wasp, known as **ushula**, is attracted to the flesh of dead animals. A hunter can follow these wasps in order to find the quarry he has shot that has run off to die. In these cases the Runa are less concerned with what the animal communicates; the behavior or presence of the animal itself becomes a communicative act.

Some ecosemiotic messages, by contrast, are aimed directly at the Runa and these forms of communication obey certain rules. This is true of a number of species whose calls are said to affirm whether a given thought or statement is true or will come true (**ali**, literally good) or whether such thoughts or statements are lies (**llulla**). For example, the squirrel cuckoo, known as **shicuhua**, has two distinctive calls. It is sometimes heard calling **ti ti ti** (or **chi chi chi**) but its most common vocalization is imitated as **shiqhua**. Whether it makes one call or the other is not due to chance but is instead intimately tied to the circumstances and relations –present and future– that envelope the listener. If it makes the first vocalization –**ti ti ti**– the bird is thought of as "speaking well" ("**alita riman**"). When such a vocalization is heard, the thoughts held or statements made by the people that have heard it are true or will come true. For example, a hunter coming across a squirrel might debate whether or not to fire on it –expending valuable ammunition on a small animal and scaring other animals away– or whether to wait. If during the deliberation the hunter thinks, "will I find big game?" ("**manachu atun aichata tuparinga**") at the same time that the squirrel cuckoo calls, **ti ti ti**, this is an indicator that the hunter's wishes will come true and that he should in fact wait for a larger animal. However, if this same bird calls **shiqhua**, this is interpreted to mean that the bird is "speaking falsely" ("**llullasa riman**," literal-

ly, speaking with lies) and the statements or thoughts in question are false.

I return again to the series of conversations about the dogs killed by the jaguar at Hilario's house to show how people incorporate acts of communication by the squirrel cuckoo into their own semiotic universe. The following exchange took place among Luisa, Delia, and Ameriga shortly after one dog returned from the forest badly wounded. At this time, nothing was yet known about the fate of the other two dogs. The working assumption was that a jaguar had killed them. The conversation was suddenly interrupted by the sound (clearly audible on my recording) of the squirrel cuckoo calling **shiqhua** –that is, in its "lying" mode. Following this, Luisa and Ameriga immediately and simultaneously uttered:

| AA: | LJ: |
|---|---|
| "**shicuhua**" **nin**<br>"**shicuhua,**" it says | **shiqhua'**<br>[imitation of the call] |

Whereas Luisa imitated the call as she heard it, Ameriga repeated it in a manner less faithful to the sound the bird actually made and more in keeping with Quichua phonological and stress patterns. Although many bird names in Ávila can be said to be onomatopoeic, they tend to be adapted to Quichua in ways that make them differ considerably from the original avian vocalization. This is especially true with stress pattern. The Runa recognize this and differentiate between a bird's onomatopoeic name and the more accurate imitations of the vocalization that these names index. These imitations need not follow Quichua patterns so strictly. For example, the call of the chestnut-headed crake, a vociferous but difficult to spot terrestrial bird, is imitated as **píturu**. However, its onomatopoeic name, **pitúru**, follows Quichua preference for stress on the penultimate syllable.

Luisa and Ameriga, it seems, were at two different stages of interpretation. Whereas Luisa imitated what she heard, Ameriga immediately thought of the bird's vocalization as a message; she repeated it as reported speech, stating "'**shicuhua**' it says." By doing so, she translated the call into a word with a Quichua stress pattern. Immediately following this, Ameriga interpreted

this call's meaning:

AA: **mashuta micusa sacsa rinu-**
[therefore, the dogs must have] eaten a coati and are going around full [i.e., they are still alive]

DG: **-napi imata cara**
if that is so, then what happened? [i.e., how to account for the wound on the dog that came back?]

•

AA: **mashuma canis- canga nigri muyu canipi imata**
I don't know, it's the coati that must have bitten [the dog], maybe when [the dog] bit [the coati] behind the ear [technically, the mastoid process of the temporal bone]

Based on the call of this bird, Ameriga, Luisa, and Delia changed their interpretation of the events in the forest. They began to hope that the dogs had not encountered a jaguar but had simply scrapped with a coati and were still alive.

It might at first be thought that the squirrel cuckoo's call is a semiotic message in its own "language" that the Runa can comprehend. This, however, does not seem to be how the Runa understand it. Rather, it seems that the message "**shicuhua**" –as opposed to the cuckoo's instantiation of this message through its vocalization of **shiqhua**– is part of an ecosystem-wide set of meanings. For example, the arboreal and nocturnal silky anteater (or pygmy anteater) is known as **tapia indillama** (bad omen sloth) or **shicuhua indillama** in Ávila. This animal is also said to sometimes call out **shicuhua**[21] to a person passing its perches in the forest. If, when the person looks up, this anteater raises one claw, this gesture is interpreted to mean that family members will die and the receiver of the message will be left an orphan. The message is, "you will live like this, alone." If, on the other hand, it shows two claws, two family members will survive the tragedy –for example, a pair of brothers whose parents will die.[22]

The Runa do not only incorporate messages from forest beings into their lives passively, they also attempt to insert themselves into the semiotic universe of the forest. For example, when

the Runa find what they consider to be inauspicious animals, they will often try to kill them. Regarding the pygmy anteater, Ventura remarks that by killing it, "[the animal] itself will die [and not the prophesized relative]. In order for it not to augur [the death of a loved one] you have to kill it instead" ("**paillata huañun, ama tapiangapa paillatata huañuchina**").

People in Ávila also insert themselves into the communicative universe in order to affect ecological relations. Several of these overt acts of communication, such as dreaming of animals, speaking to dogs, cultivating relations with game masters, and using hunting charms, will be treated in subsequent chapters. Here I want to dwell on two examples that are more fundamental. They are less overtly communicative with beings in the forest but they give a sense of how the Runa experience the causal weight, on an ecological plane, of their own semiosis.

One non-verbal way in which the Runa place themselves in the environment can be seen when they are navigating through forests. When hunting, for example, a man will often pause for a moment, extend his arm while holding a machete and sight down the flattened side of it. He will then describe an arc with the blade, imagining the path he will take across the landscape.

The Runa also use poetic speech to map their volition and intentions onto the landscape. This became clear to me when I was with Hilario and his son Lucio in the headwaters of the Palta Yacu in a very flat area of primary forest north of Ávila near the western banks of the Suno River. We had encountered a troop of woolly monkeys. Lucio killed one and the troop dispersed. Only a juvenile monkey was left hiding high in the canopy of a large *Inga* tree (**puca pacai**, *Inga alba*, Fabaceae-Mimosoideae). Throughout this hunt, I was able to record the conversations in the forest between Hilario and his son.

Because there was no clear line-of-sight between Lucio with his gun, and the monkey, Hilario decided to cut down a small palm tree in the hopes that the crashing sound made as it fell would scare the monkey into a more visible perch:

**ricugri**
make sure to be on the look out

**ta ta pu oh rasha**
I'm going to make it [fall with a] **ta ta** [sound symbolic imitation of chopping at the tree] **pu oh** [a similar imitation of the tree crashing]

•

**ricugri**
watch out

There are two important semiotic aspects of Hilario's words that I would like to highlight. The first is that chopping down the palm is a form of communication with the monkey in the tree. An alternative strategy, which is quite commonly employed in similar circumstances, would have been to shake a liana in such a way so that the movement generated by this activity at the base of the tree would be carried up to the crown where the monkey is thought to be hiding. Although quite practical, such a strategy needs also to be understood within a semantic universe in which lianas are considered to be conduits between the world of people and the world of the heavens. This can be seen in a variety of myths recounted in which beings ascend to the sky by climbing a liana.

The second semiotic aspect I wish to highlight is in regard to the way in which Hilario's words are performative. He does not say he will chop down the tree. Rather, he imitates the effects his action will have on the landscape and then, by saying "**ricugri**," he warns Lucio to be on the look out for the repercussions –in the form of the monkey's movements– of these actions.

The palm came crashing down (also audible on the recording) and, scared by this, the monkey began to climb higher up the tree. Once the monkey became visible, Lucio tried to shoot at it but the firing cap malfunctioned. Lucio reloaded and, as the monkey got into an even better position, Hilario encouraged him again to fire

**ha cuna ali can**
there, now it's good

Lucio, however, did not immediately fire his gun. Instead, he first uttered the following:

**te–y–**

The word **tey** is a sound symbolic adverb that imitates the action of shot successfully hitting its target (see also Chapter Nine). The monkey then began to climb lower, into better range, and Hilario implored his son to fire quickly:

(*urgently*)
**urasta cunan astahuan**
hurry, now really

Lucio fired his gun and the shot hit the monkey

(LJA: *all of these phrases said rapidly and excitedly*)

**cai**
there,

**cailla**
there

**cai**
there [describing how the monkey is about to fall]

**imash- tucun**
what happened?

**chi mundu'**
there, it's curled up in a ball

**lihuarcama**
really punished [literally whipped, i.e., wounded]

•

(HJ: *whispering*)

**maita**
where?

(LJA: *now also whispering*)

**chillata tiaran**
just there, it's just staying there

(*rapidly*)

**riqui riqui riqui riqui**
look look look look

(*softly*)

**sa purí—**
moving very slowly

This portion of Hilario and his son's conversation in the forest as they hunt gives a glimpse of how the Runa interweave their semiotic acts into an ecological universe whose elements they want to harness to their own ends. Lucio's verbal performance of **tey**, like Hilario's performance of cutting down a palm tree, was a kind of poetic foreshadowing of the ways in which he wanted to affect the system. As such, it too is a component of ecosemiois.

That the Runa feel that they can reach out and communicate with the beings of the forest is made possible by a view of the ecosystem that posits that events in nature should be seen as personalized. People are connected to, and can cause, specific natural events. For example, when an Ávila shaman under the influence of **aya huasca** was curing a patient, a tremor hit the region. He interpreted this as a punishment from God for his having taken a hallucinogen –something that

is expressly frowned upon by the missionaries (see Chapter Seven).

Perhaps the ability of different beings to affect weather can more clearly illustrate this notion that nature is personalized. For example, the toucan can "call in" rain when it is "hungry" (**yarjachipi**) for water as can the howler monkey (**cutu**) and the orange-bellied euphonia (**pina pina**), a strikingly beautiful small blue and orange tanager. All of these animals become much more vocal before rainstorms.

Land turtles (**yahuati,** *Chelonoidis denticulata*, Testudinidae) are also associated with the ability to cause rain. Turtles found in the forest are often taken back to the house and placed in a pen that is made by driving stakes into the ground to enclose a space already delimited by the buttresses and trunk of a tree. Hilario had a turtle kept like this for a while on one occasion when I was staying at his house. After a night of heavy rain, his family found that the turtle had escaped by burrowing through the softened soil in which the stakes had been driven. They concluded that the turtle had caused the storm so that it could escape.

People, can also harness the turtle's ability to cause rain in order affect the weather for their own ends. Turtle shells are often roasted over the fire in order to eat the fat and meat that adheres to the inner portion of the carapace. Placing such burnt turtle shells in the streams, where bones are normally discarded, is thought to invariably cause rain. In a wet region like Ávila most people have no interest in making it rain; it is usually thought to be due to carelessness in disposing of the shell that rain is caused by such an activity. However, one can also intentionally make it rain in this way –say, to thwart an enemy's barbasco fishing expedition (this fishing technique is dependent on several days of dry weather and low water levels for success). Priests are also thought to be able to cause rain. They do so, it is said, when the water levels in their tanks at missions like Loreto are getting low.

Affecting rain is very similar to sorcery. Just as most people deny they practice sorcery, they also rarely claim to cause rain. Such activities are generally seen to be the work of malicious people. Many people, however, cure those that have been ensorcelled. Similarly, just about

everyone uses techniques to stop rain. The most common of these is blowing tobacco at rain clouds. By doing this, a person's life/breath (**samai**), as made visible by smoke, is thought to "fight [with the rain] and make it run off" ("**macasa calpachin**"). I experienced this very vividly on one occasion in the forest with Hilario and his family. We set up a camp in the forest when suddenly we became caught in a tremendous rainstorm with heavy winds and thunder and lightning. When a very large branch came crashing down very close to our shelter, everyone jumped out. To "fight with" and send off the storm, the men began to blow cigarette smoke and to fire their guns in the air. This example indicates that ecosemiosis is not just a process of listening in to communications in the forest. Nor is it only a process of entering into such ecosemiotic loops in order to be understood. Rather, such communicative strategies are predicated on the idea that people are directly connected to the elements and beings of an environment and that they can do things to affect these relationships.

The Runa ecosemiotic universe involves the communications and motivations of actors at a variety of ontological levels. The volition of any of these can have a direct impact on the entire ecosystem. This is evident from the following example regarding the emergence of the edible leafcutter ants from their nests (see Chapter Two). One evening, a variety of ecological and meteorological signs indicated to the family with whom I was staying that the ants would certainly emerge from their nests early that morning. However, around midnight, a lot of thunder was heard and the ants therefore went back into their nests. The family was quite disturbed by this. They explained that **rayu** –the lord of rain, lightning, and thunder– became very angered because a neighbor and his sons had been fishing with barbasco much too frequently in the river. Barbasco fishing requires low water levels. In order to thwart the plans of this family, **rayu** made it rain. This however, had the concomitant result of keeping the ants from exiting their nests which, in turn, meant that the family with whom I was staying, would not be able to gather these delectable creatures. This example indicates the semiotic interconnections between actors, from a variety of ontological levels, in the ecosystem.

**Metaphoric Ecology**

*The Bat is dun, with wrinkled Wings -*
*Like fallow Article -*
*And not a song pervade his Lips -*
*Or none perceptible.*

*His small Umbrella quaintly halved*
*Describing in the Air*
*An Arc alike inscrutable*
*Elate Philosopher.*

*Deputed from what Firmament -*
*Of what Astute Abode -*
*Empowered with what Malignity*
*Auspiciously withheld -*

*To his adroit Creator*
*Ascribe no less the praise -*
*Beneficent, believe me,*
*His Eccentricities -*

Emily Dickinson (1997: 280)

On a drizzly morning in March of 1997 I attended a baptismal party for the daughter of a young couple in Ávila. The house was very small and unfinished so most of us were outside on the muddy patio. A few people, including a young man named Alejandro, had taken shelter underneath the large umbrella that belonged to the schoolteacher's wife. Alejandro jokingly referred to the umbrella as the wing of a bat (**tuta pishcu rigra**). That Emily Dickinson would choose to think of a bat as an umbrella may not be so foreign to the Runa. Would she, however, have thought to

consider the reverse –an umbrella as a bat in the way that Alejandro did? This section is about how and why the Runa make such metaphoric comparisons, not only between the domains of nature and culture, and vice versa, but also between various kinds of beings within nature.

In their use of metaphor, the Runa, in addition, go beyond trying to make sense of one category in terms of another, as Dickinson or Alejandro were trying to do, for metaphoric links are also part of local understandings of ecological connections. That such connections are productive—i.e., that they can affect the actors they link in a system—is testament to the fact that metaphor plays a central role in Runa understandings of ecology. Accordingly, I term this aspect of Runa understandings of nature "metaphoric ecology" and I see it as central to local ecosemiotics.

By making the ineffable tangible, metaphor is an extremely powerful tool through which to understand ecological relations. For example, the inner rachis of the shrubby palm known as **amarun anzuilu** (*Desmoncus polyacanthos*, Arecaceae) is given to dogs so that they will catch animals quickly without scaring them off. The long and narrow terminal leaflets of this plant are, "modified into thickened spine-like hooks" (Gentry 1993: 184). These catch fast to people, animals, and vegetation alike. The Quichua name **amarun anzuilu** means "the anaconda's fish-hook." The anaconda is said to hunt animals by attracting them with "its mind" ("**yuyaihua**"). The image of fishing with hook and line is often used to make this power of attraction tangible. Anyone walking through the forest and suddenly becoming tangled in the unforgiving hooks of the **amarun anzuilu** plant can get a sense of what being reeled in by an anaconda might be like. The relationship between the anaconda and its prey is the kind of ecological connection that metaphors make palpable.

### *Medicinals*

Medicinal plants can provide insights into how, through metaphoric ecology, the Runa link disparate organisms in the ecosystem. For example, several species of the genus *Drymonia* (Gesneriaceae) are referred to as **cacatao panga**. These are all subwoody epiphytes that share the

distinctive feature of having prominent hanging perennial orange floral bracts. These bracts link this plant, via a visual metaphor, to the conspicuous bare red throat of the red-throated caracara. This large and often-heard raptor is known as **cacatao** in Quichua. The name is onomatopoeic of the bird's distinctively raucous call. The Runa prize the **cacatao panga** as a remedy for sore throat. When people have sore throats, their voices become hoarse and begin to resemble the call of the red-throated caracara. An aural metaphor, then, links a person suffering from sore throat to this bird.

By recognizing this plant as a remedy, the Runa complete an ecological circuit. Although the plant and the bird are already linked by a visual metaphor, this metaphor does not really become ecological until people enter the picture. What I mean is that the plant only works as a remedy because of the additional aural metaphor that links the caracara to a person with a sore throat. This additional link is what infuses the bird-plant metaphor with functional power. Metaphoric ecology, then, is about recognizing and creating such semiotic links—that is, links of meaning that conform to specific logical rules—among elements in a landscape. It is also, as this example illustrates, about endowing those links with directional attributes of cause and effect.

The **cacatao** "ecological field" extends further into the forest as well. Still another plant is referred to in Ávila as **cacatao panga**. It too is used to treat sore throat and for the same reasons. Like the species of the genus *Drymonia*, this one also has showy bracts that link it to the red-throated caracara. This second **cacatao panga** (*Psychotria poeppigiana*), however, is a member of the Rubiaceae (the coffee-tree family), a botanical family that is unrelated to the Gesneriaceae (the African violet family) to which *Drymonia* belongs. Furthermore, it is quite dissimilar in both habit and appearance. *P. poeppigiana* is not an epiphyte but forms a colony of shrubs. What unites this plant with the other **cacatao panga**, and what makes it considered a remedy, has nothing to do with shared morphological features. Plants that are morphologically similar are often lumped together in folk taxonomies even when they are unrelated in an evolutionary sense (see Chapter Two). In this case, however, the formal semiotic properties, and not mor-

phological ones, are what endow both of these plants with the same name as well as similar functions and roles in a metaphoric ecology. Such metaphoric ideas of relatedness must also be considered when looking at local systems of classification.

Other medicinal plants that play important roles in linking organisms in the environment include **amarun huasca** (the anaconda's liana, *Gouania* sp., Rhamnaceae), a liana whose pounded bark is burned and applied to the bodies of people suffering from **amarun paju**, a kind of dermatological fungal affliction that causes spotted discolorations that are likened to the patterned designs on the skin the anaconda. People are said to contract **amarun paju** when they handle anacondas or boas without observing the proper restrictions (i.e., avoiding salt, sexual relations, peppers, and hot or warm food). This liana is used because the reticulations created by its fissured bark resemble the patterned skin of the anaconda.

Similarly, a leaf decoction of the climbing vine **dumbiqui callu** (the toucan's tongue, *Heteropsis* sp.?, Araceae) is taken for nausea. The logic behind this use is that the leaves of this plant are long and narrow like the tongue of the toucan and this bird is known to regurgitate the seeds of many of the larger fruits it eats.

Plant remedies such as **cacatao panga**, **amarun huasca**, and **dumbiqui callu** can be understood as conforming to a virtually pan-human predilection, known as the "doctrine of the signs," to make metaphoric associations between physical attributes of plants and aspects of the illnesses they are supposed to cure. However, in Ávila, their role in laying out a metaphoric ecology takes them beyond this. Such plants infuse the landscape with a sense of the possible connections among disparate organisms that exist within it. They also serve to highlight salient morphological and behavioral features of different organisms. By combining these two qualities, such plants serve to make the complex rain forest system comprehensible and meaningful. They do so by projecting a web of meaning onto the landscape. Such a web is not only seen as a representation of natural history; people can also harness it.

I want to dwell briefly on the medicinal context in which such metaphoric remedies are

used in Ávila. If metaphoric ecology is meaningful locally, it is because of the power that is carried along its semiotic circuits. By means of the plants discussed above, the Runa attempt to harness certain properties of the forest and bring them to bear on an illness in order to effect its cure. Other remedies, by contrast, reverse the flow. Instead of harnessing specific semiotically-coded elements of the forest in order to cure an illness, these are used to deposit an illness back into the forest.

This, for example, is true of another kind of scarab beetle known as **sipi curu mama** (*Phileurus didymus* and possibly other members of this genus, Scarabaeidae). A living beetle is rubbed over the belly of an infant that is suffering from **sipi huañui** (pneumonia) and then released to fly back to the forest. The beetle is thought to carry the illness away to the forest where it dies from the malady it has absorbed. According to G. Onore (pers. comm.), the males of some species of this genus are very short-lived; they die soon after copulation. That such apparently healthy males can be found dead may explain the logic of this cure. I dwell on this example because it shows how the power of a particular remedy does not lie necessarily in its meaning, in some formal semiotic sense. In this case there does not seem to be a metaphoric connection between this beetle and the illness. Rather, its efficacy as a remedy seems to lie in the fact that such a powerful and stocky beetle can be captured, rubbed on a baby, and then released to fly far away into the forest where it will suddenly die. In this way, this beetle is seen to transport vital flows. Ecosemiotic connections, then, become meaningful because of the ways in which they articulate with certain flows of harm or help, or of knowledge and danger.

The Runa do not recognize medicinals that are efficacious due to metaphoric logic as being distinct from other kinds of medicinals that may be considered efficacious for other reasons such as the fact that they taste bitter (**jaya**), and therefore may contain powerful biodynamic compounds. Indeed, the use of medicinals is a naturalized part of forest ecology and this is what gives such plants, including those that are useful for metaphoric reasons, their power. Evidence of this is that animals also use medicinal plants. For example, in the forest with Juanicu, we found a

treelet, known as **tsindacu** (*Allophylus* sp., Sapindaceae) whose base had been extensively scraped. Juanicu explained that a red brocket deer (**chundárucu**) buck had done this with its antlers. After scraping the tree in this fashion, Juanicu continued, the buck would then chew the scrapings and place them on the belly button of his newborn offspring so that the fawn "can grow strong and fast like him" ("**paishina sinchi calpaisiqui tucungapa**"). Others say that deer make similar use of the scrapings of another small tree known as **gunahuaru yura** (*Psychotria alboviridula*, Rubiaceae). For similar reasons, the common piping-guan (**yura pahua**) is said to lead its chicks through patches of the herb known as **pahua yuyu** (*Pilea* sp., Urticaceae) in the early morning. In this way, the chicks will bathe in the dew accumulated on the leaves of this plant; this, it is believed, will make them grow strong. Ventura notes that when the piping-guans have walked through this herb patch in such a fashion, it is clearly noticeable because the leaves look trampled. The behavior of the piping-guan is similar to that of the Runa. Young children are sometimes made to bathe in the early morning in cold streams so that they will grow strong. Furthermore, the herb **pahua yuyu**, utilized by the guans, is a member of the urticating nettle family. Many other members of this family are used by the Runa in various forms as remedies because of the stimulating pain that their application to the skin causes.

Another example of a plant used by animals medicinally is **puma quihua**, a kind of grass (Poaceae) found in the disturbed vegetation of garden fallows and forest tree falls alike. Both domestic dogs and forest felines are said to ingest this as an emetic when they suffer from stomachache.

Sometimes the medicinal worlds of animals and people intersect. For example, **huacu** (*Mendoncia* sp., Acanthaceae), a fetid-smelling, opposite leafed forest vine whose leaf undersides have large purple blotches, is said to be a useful remedy for snake bite. Its leaves are chewed (**mucusa**) or ground in the hand (**jacusa**) and placed on snakebites to reduce pain. People learned of this remedy when an Ávila Runa observed a laughing falcon, (**huacau**) chew and apply this plant to the spot where it had been bitten by a snake. It then, apparently, recovered. Such

birds are known to eat snakes and hence they can often be bitten in the process. From this observation, the people learned about this remedy. Before observing the bird use this plant, the Ávila Runa, "were ignorant like little boys" as Juanicu said.[23]

**Experiencing Metaphor**

Although metaphor does not seem to be a local ecological classificatory category as distinct from other forms of relatedness (but see Chapter Five), actors in the ecosystem are affected by the way they fit into metaphorical relations. The kind of relationship that I describe as a metaphoric one is felt to be a "productive" relation for the Runa.

For example, the Amazon red squirrel (**ardilla**) is considered to be the nephew (**subrinu**) of the red howler monkey (**cutu**). This is because the large bushy red tail of the squirrel resembles the red coat and bushy beard of the howler monkey. Similarly, the diminutive tamarin monkey (**chichicu**) is considered to be the nephew of the spider monkey (**maquisapa**). Both are predominantly black in color and both are quite gregarious. In addition, both travel quite noisily through the canopy and can be quite "hyperactive" as opposed to other more sedentary kinds of monkeys such as the howler. Such metaphoric correspondences between "nephews" and "uncles" have important repercussions. It is said that, in the recent past, boys were prohibited from playing with or handling squirrels or pet tamarins lest the game master that "owns" both of these become angered and stop supplying hunters with meat in the form of spider and howler monkeys.

The productive force of metaphor can also be seen in the elaborate ways in which animals were classified according to "blood type." This has little relevance today but it was very important a generation ago when blowguns, with their curare-tipped darts, were the primary weapons used in hunting. In order to assess the quality of a given batch of blowgun poison, small animals that were paired with larger ones based on shared blood type were shot with poison tipped darts. If the smaller animal of the pair succumbed to the poison, it was thought that the larger one would also die. Many of the correspondences between these pairs are metaphoric. For example, if a

squirrel died when shot with curare, that batch of curare would be able to kill both howler monkeys (for the reasons stated above) and coatis (**mashu**). This latter raccoon-like animal is grouped with the monkeys because it has "**munulaya yahuar**" ("the same kind of blood as a monkey"). The Runa explain that this is evidenced by the fact that it is both arboreal and social. The coati, in addition, is related to the squirrel because, like squirrels, coatis are found not only in trees but on the ground as well. Like squirrels, they also have long bushy tails. Curare that is effective against caviomorph rodents such as aguouchies, agoutis, and pacas, will be effective against peccaries. These all have "tasty" blood ("**mishqui**," sweet or salty). The rodents are in many ways smaller versions of the peccaries. They are terrestrial game and have grayish coats.

The examples I have given so far indicate how the Runa use metaphoric analogies as a classificatory paradigm which they apply to the natural world and how they draw certain inferences about "ecological" relations among the animals they classify as such. However, the weight the Runa give such relations extends beyond this. As I have hinted at with the nephew/uncle relation described above, ecological actors—in this case, animals taken-as-subjects—are also seen to "experience" metaphor and react accordingly.

Another example of this is that when the edible and sweet **pacai** (*Inga* spp. Fabaceae-Mimosoideae) begins to fruit in December, snakes become angered because they feel that the sweetness of this fruit will diminish the strength of their venom (**jambi**). The Runa think of the potency of substances such as blowgun poison, venom, and medicine (all known as **jambi**) as being related on account of their bitter (**jaya**) nature. For this reason, during the season when *Inga* fruits, one should not attempt to add substances to curare in order to strengthen it, lest this act actually weaken it due to contamination from the abundance of sweet fruits (from *Inga* as well as other taxa) during this season. The Runa also apply this logic when curing snakebite. When Ventura was bitten by an **uritu machacui** as a child he was given honey (**sacha mishqui**) to drink and honey was also applied to his wound. Because sweetness is seen to be the opposite of poison, the poison becomes "tired" and weak (**sambayan**). Because of the same logic, Ventura was not

allowed to handle blowgun poison for some time after. Blowgun poison and snake venom are similar kinds of **jambi**. They are considered **huañuchipura**, that is, members of a class that kills.[24]

According to the Runa, the fer-de-lance (**ardilla machacui**, *Bothrops atrox*) is the snake most angered by the fruiting **pacai** trees. This snake is often found near streams and it is said that because of the threat that the sweet **pacai** fruits poses to its venom, it lashes out at children that walk the streams in order to fish **huili** (*Lebiasina* sp., Lebiasinidae) and gather snails and crabs (see Chapter Three). In Ávila, children are thought to be the ones who primarily enjoy sweet fruits such as **pacai**. This is why this snake is thought to single them out.

The venomous snakes, such as the fer-de-lance, are imbricated in a complex classificatory web of analogies. Because of a model that opposes sweet/salty (**mishqui**) to bitter (**jaya**), anything considered **mishqui** becomes antagonistic to the snakes. The specific relationship between **pacai** and the snake, however, goes beyond this paradigm. *Inga* trees that produce these fruits are members of the legume family. They produce extremely long thin leguminous fruits that hang down off of their branches. These resemble snakes in their length and girth and when they are on the ground, they can even be mistaken for snakes by a naïve observer.

Such metaphoric correspondences are actually seen to affect the experiences and behavior of the snake. Metaphor for the Runa is not only seen as a classificatory paradigm. Rather, it is also an inherent aspect of ecological relations; it is part of the nature of things and is therefore readily apparent to animals as well.

**Paipa… (It Belongs to…): Metaphoric and Other Kinds of Ecologies**

Metaphoric ecology is closely related to other kinds of ecologies as well. Many of the ecological connections that the Runa observe are similar to the ones that biologists would also see in the forest. For example, a kind of rove beetle (Staphylinidae) known in Ávila as **añangu caya mama** (the ant-calling beetle) is said to scout out new colony sites for leafcutter ants (**añangu**, *Atta* sp.). When it finds a suitable place it calls, "**tin, tin, tin, tin**" in the evening and at dusk so

that the ants can found a new colony there. This beetle is often then seen circling around the leaf-cutter ant nests.

According to entomologists, many genera of rove beetles are specifically adapted to living in close relation with ant colonies. They are often modified to resemble the worker ants of the species they live with and they feed on their larvae and accumulated food reserves. Some also secrete chemical substances that pacify their hosts and they are also known to groom and feed them (Hogue 1993: 256-257). In some ways, then, Runa observations are in concordance with those of the biologists regarding the ecological connections between this beetle and the leafcutters.

The Runa, like biologists, also recognize mutualistic relations among organisms. For example, the Runa note that the blue crowned motmot (**virdi uma tumali**) eats the remains of **chunda** palm fruits that are spilled to the ground by the blue crowned parrot (**ushicu**) as it feeds on these.

The Runa do not differentiate categorically between the kinds of ecological relations, such as the aforementioned, that would be acceptable to biologists, and the metaphoric ones I have described earlier. That this is so can be seen most readily by the way they describe them. In both cases, the Runa use the third person possessive pronoun **paipa** (his, hers, or its) to describe the relationship.

The Runa use this term to describe many non-metaphoric ecological connections. For example, the tree **dzilan dundu** of the genus *Cecropia* (possibly *C. marginalis*, Cecropiaceae) is guarded by very aggressive ants called **dzila añangu** (*Phachycondyla* sp., Formicidae) whose sting is extremely painful. These ants are said to live only in association with this tree. In addition, it is said that the casqued oropendola (**buhya mangu**) makes nests exclusively in this tree in order to receive protection from these ants and from the spines that cover the petioles of the leaves. Because of this ant's role as a protector of both the tree and the birds that nest in it, the Runa consider it to be the "mother" of this tree. This tree, it was remarked to me, "has many mothers [i.e., ants], and its mothers can really cause pain" ("**ashca mamayu, paipa mama yapa**

**nanachin**").

In similar fashion, an enormous and heavily buttressed tree of the genus *Ficus* (Moraceae) is called **cuhua parutu** or **tuta pishcu parutu**. This second name, translatable as "the bat's *Ficus*," refers to the fact that bats are known to feed heavily on its fig-like fruits and that they also often sleep in the deep crevasses created by the buttresses that run high up the trunk of the tree.[25] The tree, then, is described by people as being **paipa yura** (its [i.e., the bat's] tree).

Another example is the **indillama curu mama** (*Dichotomius quiquelobatus*, Scarabaeidae). This is considered the sloth's (**indillama**) beetle. It lives in the fur of this animal and is therefore referred to as the sloth's louse (**paipa usa**).[26]

The pronoun **paipa** is also used to mark metaphoric relations. For example, Ascencio was breaking a trail through vegetation on a plant collecting trip when we suddenly came across a very dangerous viper (*Bothriopsis taeniata*) sunning itself on the leaves of a small palm (**huacamaya**, *Geonoma tamandua*, Arecaceae). As it recoiled, ready to attack, Ascencio killed it with a blow to the head with the flat side of his machete. When it was dead, he examined it and identified it as **istrilla machacui** (the star's snake). He explained that this was, "**istrilla, paipa machacui**" ("the star, its snake"). This is because the numerous bright yellow, almost iridescent dots on the black skin of this viper resemble the stars and galaxies visible in the Ávila sky on a clear, moonless night.

The possessive pronoun **paipa** is also used to group seemingly disparate organisms by means of metaphoric connections. For example, I collected a tawny-colored fungus with Juanicu in the forest. Because it resembles the ear of a feline, it is known as **puma callamba** (feline mushroom) or **puma nigri** (feline ear). Juanicu mentioned that in the forest, one can also find a vine that looks like the ear of a feline (possibly **puma panga**, *Anthurium* sp. Araceae). To describe this he said, "**paipa angupas tian**" ("there is also a vine that belongs to it").

Metaphoric relations overlap with other kinds of ecological relations and these mutually inform each other. That the Runa use **paipa** indiscriminately to refer to all of these is another

example of just how intimately intertwined semiotic relations are in Runa understandings of ecology.

This layering of different kinds of ecological relations that is captured by **paipa** is evident, for example, in understandings of a kind of boa that is referred to as **dumbiqui amarun** (the toucan's boa).[27] This is referred to in this fashion because it has a red "tail" like the toucan. The red tail of this boa causes it to be "**dumbiquimanda**" ("coming from the toucan"). The term **paipa** is also used to describe the relation between the toucan and the "toucan boa."

This relation between the toucan and this boa is much more complicated than that between, say, the stars and the *Bothriopsis* viper, for this boa, in addition, is said to hunt the toucan. Moreover, it is also considered the master (**curaga**) of the toucan; the bird, in turn, is considered its domesticate or pet (**huaihua**). Although such masters are not supposed to hunt their own pets (see Chapter Nine), the fact that the boa hunts one of its own charges is seen by some people in Ávila to be similar to the way in which a Runa can occasionally eat one of his chickens but otherwise takes good care of his fowl. The relationship between the snake and the toucan is not only metaphoric but ontological as well. The snake is, in some way, derived from the toucan. This is what is implied by the term **dumbiquimanda** –from the toucan.

**The Semiotic Mechanics of Capturing an Ecological Relationship**

I want to give a sense of the semiotic mechanics of metaphoric ecology by examining the range of ecological metaphors in Ávila. Temporal analogies may be as important as the visual ones I have already presented. For example, the tree *Maquira calophylla* (Moraceae) is called **ardilla inchi** (the squirrel's **inchi**) because it resembles another forest tree known as **inchi** (*Caryodendron orinocense*, Euphorbiaceae). **Inchi** is a prized delicacy and it is avidly collected by the Runa when it is in fruit (roughly between March and May). Peccaries are able to tear through this fruit's very hard rinds and also eat it. Squirrels and other smaller rodents, by contrast, eat **ardilla inchi**. The metaphoric relationship between the two kinds of fruit-bearing trees

is not based on morphological similarities. Rather, it is based on a temporal one. The similarity lies in the fact that both fruit at the same time and both have oily seeds.

Temporal and morphological metaphors also overlap. For example, the small tree *Triplaris dugandii* (Polygonaceae) is called **añangu caspi** (the ant tree) because its wind dispersed fruits drop to the ground around the time that the leafcutter ants have their nuptial flights. In order to pinpoint the few minutes out of the year that these ants fly, the Runa make use of a variety of exact ecological, ethological, and meteorological markers (see Chapter Two). The fruiting of the **añangu caspi**, however, is not one of these. The flight of the leafcutter ants takes place usually between mid-September and occasionally as late as early November. **Añangu caspi** (according to my observations), like other wind-dispersed trees (e.g., the kapok-producing trees *Ceiba samauma* and *C. insignis*, Bombacaceae), seems to fruit in Ávila in the relatively drier month of August when wind dispersal is a more viable alternative than in the wetter months. As a predictor of the nuptial flight event, then, the ant tree is a not accurate enough to be useful.

Nonetheless, there is another feature that makes up for the relative inaccuracy of the temporal metaphor; the fruits of this tree bear a striking resemblance to leafcutter ant reproductives. They are of the same approximate size as the large reproductive ants and, like the ants, they are also rusty in color. These fruits are not fleshy but hard and dry like the exoskeletons of ants. They are wind-dispersed samaras whose wings are also quite similar in appearance to the wings of the reproductive ants. Finally, the ovary that houses the seed is rounded like the enlarged and fatty abdominal segment of the leafcutter reproductive.[28]

Analogies between beings can be aural as well. For example, the white-bearded manakin is a diminutive but showy bird known in Ávila as **cuchi suhui suhui** (collared peccary manakin). A distinctive feature of this bird is the, "loud, firecracker-like snap, apparently produced mechanically by the wings and often given in a fast series" (Ridgely and Greenfield 2001: 559). The Runa equate this sound with that made by collared peccaries (**lumu cuchi**, **sahinu**) when they clack their teeth. The name for this bird, then, is based on an aural analogy rather than a visual

or temporal one.

Often, more than one metaphor operates at a given time. These multiple metaphors create rich webs of semiotic interpenetrations that extend throughout the ecosystem. One example of this phenomenon is visible in the Quichua name for the larva of a kind of flannel moth (Megalopygidae). This larva is called **indillama chini curu** (the sloth-nettle larva). Like a nettle (**chini**), it has, "highly toxic nettling bristles" (Hogue 1993: 326). And like the sloth, it has a long coat of "white flowing hair that almost invites petting" (ibid.). It also resembles a sloth in its slow movement along branches.

**Metaphor and Perspectivism**

In order to capture an ecological relationship metaphoric ecology can also incorporate the sorts of perspectival aesthetics discussed in Chapter Three. For example, the piratic flycatcher (**ahuarashi**) is a small but very aggressive bird that forces oropendolas (**mangu**) and yellow-rumped caciques (**chiru**) to abandon their nests by, "incessantly harassing [their] rightful owners until they give them up" (Ridgely and Greenfield 2001: 530). Because of this behavior, this bird is considered by the Ávila Runa to be the "wasp" of these larger birds. The caciques and oropendolas are immune to the "normal" wasps that harass humans. Indeed, as the Ávila Runa note, for protection, the yellow-rumped cacique almost invariably makes its nest high in trees beside wasp nests, and oropendolas will also nest close by for the same reason (see also Ridgely and Greenfield 2001: 695). Thinking of the piratic flycatcher as a wasp is an instance of metaphoric ecology. The analogy with the wasp helps to capture elements of this animal's behavior and its relation to other animals. It is also perspectival; from the perspective of the caciques and oropendolas, this bird *is* a wasp and, as such, it has the same function as a wasp would among the Runa. By contrast, the "true" wasp (both in a taxonomic sense, referring to the Vespidae, and from the perspectival vantage point of the Runa as opposed to that of other beings) is not perceived as such by these birds who actually establish nests in the proximity of wasp colonies for protection.

Another example of the way in which metaphoric ecology and perspectivism is combined in Ávila can be seen by examining local understanding of ecological replacement. According to the Runa, many bird species found in the Ávila region have their equivalents in the montane forests to the west. These montane equivalents are often distinguished from their lowland counterparts with the adjective **urcu** (mountain). By contrast, in this context, the birds from the flatter Ávila region are conditioned by the adjective **llacta** (village). The mountain birds are thought to have similar behaviors and appearance as their "relatives" (**ayllu**) in the "village." The **llacta/urcu** (village/mountain) pairs are usually congenerics or otherwise taxonomically closely related. For example, **ushicu** (the blue-headed parrot, *Pionus menstruus*) is found around Ávila whereas **urcu ushicu** (the red-billed parrot, *P. sordidus*) is found at higher elevations. Examples of other lowland/montane pairs include:

| Kind of Bird: | **Llacta** (Village): | **Urcu** (Mountain): |
|---|---|---|
| Guans | **puca pahua**<br>Spix's guan, *Penelope jacquacu* | **urcu puca pahua**<br>Andean guan, *P. montagnii* |
| Chachalacas | **yura pahua**<br>common piping-guan, *Pipile pipile* | **jarihua pahua**<br>wattled guan, *Aburria aburri* |

The mountain birds are occasionally found in the forests around Ávila and similarly birds from the lower parts occasionally venture to the mountains. This is explained in the following manner: the lowland/highland pairs are relatives. As relatives, they often invite each other to share food. Trees bear fruit at different times along an altitudinal gradient so that a given tree will be in fruit at lower elevations before it fruits at higher ones. Forest fruits such as **cara caspi muyu** (*Guatteria* spp. Annonaceae) and **sapallu caspi muyu** (*Schefflera morototoni*, Araliaceae) are considered the "plantains" (**palanda**) of these pairs. Birds from one pole of these pairs will travel to the territory of the other in order to invite them to their own territory, saying to their relatives: "come over to eat plantains, the plantains are nice and ripe" ("**caiman shamui palandata micungapa, palanda ali pucun**.") This relationship is metaphoric in the sense that vil-

lage/mountain pairs are analogues of each other.

The relationship is also perspectival in that these birds are seen to act in the same way that the Runa do. Plantains are the quintessential human food. When people invite each other over to eat they use the term **palanda** as both a polite euphemism for game meat as well as a synecdoche for the meal in general. Furthermore, the Ávila Runa, like the bird pairs, also live along an altitudinal gradient. People take advantage of the fact that because of this altitudinal gradient there is a lag of about a month between the **chunda** palm (*Bactris gasipaes*, Arecaceae) seasons in the lower and higher parts of the village. It fruits earlier in the lower parts and, in the higher parts, it is still available long after there are no more fruits in the lower parts. Taking advantage of this, people from the higher parts will often invite their relatives from the lower parts, and vice versa, in order to share beer made from the oily fruits of this tree. So, when the birds invite each other to eat "plantains," they do so, according to Runa norms of exchange.[29]

I have been concerned throughout this chapter with the ways in which semiotic acts, and more specifically metaphor, are understood to make sense of nature. I want to end the chapter, by contrast, with one example of the way in which such ecosemiotic strategies are applied to the world of the Runa in order to predict and affect the behavior of people. As my discussion of bats and umbrellas indicated, the social sphere is used to understand the natural one just as much as the other way around. How this operates in Ávila can be seen from the following example. Many years ago, a married man found himself in the unusual situation of having a young, single female non-relative living for a time in his house. He began sleeping with her by sneaking into her bed when he thought his wife was asleep. His wife became very distressed and finally told her godfather who then came over to visit in order to see for himself. The godfather pretended to get drunk and at night, when everyone was asleep, he placed a can in the path that he knew the adulterer would take to get to the bed of his paramour. Sure enough, when this man tried to sneak over to his lover's bed, he stumbled over the can and made a loud noise that revealed to everyone his intentions. The strategy used to catch this man is both metaphoric and perspectival.

Although not explicitly stated as such, it seems to me that the logic and humor of his entrapment lies in an implicit equation made between the adulterer and predictable (and not particularly intelligent) game animals such as the armadillo. Armadillos are primarily nocturnal and can easily be caught in deadfall traps by simply placing such structures on the game trails it is known to take. Because these animals are almost blind, they easily fall prey to these. The perspectival quality of the strategy used to "trap" the adulterer lies in imagining how he sees the world as if he were a foolish game animal.

**Conclusion**

The first three chapters of this dissertation are, in many ways, about the question of what knowing means. This chapter, by contrast, begins to address what that "object of knowing" is. Rather than focusing on how the Runa know nature, in this chapter I focus more on what the Runa see as constitutive of nature. I use the phrase "object of knowing" loosely because, as I have tried to show, the Runa see nature as an aggregation of subjects rather than objects –as a collection of beings rather than things.

My claim that the Runa see nature as composed of subjects should not be taken as an excuse to fantasize about the depths of romantic communion they may engage in with these beings. Rather, the formidable task at hand is to see how, given this claim, people in Ávila see the relationships between such beings to hold together. This chapter, in conjunction with the one that follows, is precisely about tracing the various ecological links as defined by the Runa. Because beings in the forest are sentient, and by extension communicative, the most important links that relate these organisms are ones of meaning. This is why ecology for the Runa is semiotic. If ecology is semiotic, the goal is to understand the various rules –the grammar so to speak– of ecosemiotics.

Such a task, however, is not only a descriptive endeavor of transcription and translation. I am also concerned with understanding the force that such ecosemiotic links have for the Runa

–that is, their perlocutionary effect (to continue with the linguistic analogy). This is why I am not content with merely recognizing, for example, that metaphor is a pervasive feature of ecology for the Runa; I also try to address how metaphor is seen to be causal in that system as well as how it is felt to be experienced by humans and non-humans as well.

As in the previous chapter on perspective, my interest is not so much in how metaphor is part of a representational model. Rather, I am concerned with how it has force and how people can access that power. In other words, what I find interesting about ecosemiotics is not only its "grammar" but how people use that "grammar" to say and do things in the world of beings. The chapter that follows will elaborate on this.

# Chapter Five
# How Dogs Dream:
# Ecological Empathy and The Dangers of Cosmological Autism

## Introduction

While doing fieldwork in Ávila, I became vexed by a seemingly trivial ethnological conundrum: Why do the Runa interpret the dreams of their dogs literally given that they interpret most of their own dreams metaphorically? Far from being an esoteric foray into arcane symbolism, this puzzle has turned out to provide insight into local understandings of ecology. As I noted in Chapters Two and Three, whereas western biologists tend to treat ecology as the study of law-governed interactions among organisms, the Runa's proclivities run more to questions regarding how such relationships are determined by the ways in which different kinds of beings perceive the world. The ecological challenge for the Runa is to understand how organisms that possess radically different ontologies understand the world so that they, in turn, can establish or avoid communication with them. The question of what and how dreams mean, then, is fundamentally an ecological one for the Runa because dreaming is part of an attempt to understand and act within the web of relationships that connects different kinds of beings.

As I mentioned in the previous chapter, Amazonians address the problem of trans-specific communication by means of a cosmological model known as perspectivism (Viveiros de Castro 1998). This model allows them simultaneously to account for the ontological differences of myriad beings and to establish communication with them despite these differences. To recapitulate, the model is based on two interlocking claims. First, all sentient beings, be they spirit, animal, or human, possess a human soul. They all see themselves as humans. That is, their subjective world-view is identical to the way the Runa see themselves. Second, although all beings see themselves as humans, the ways in which they are seen by other beings depends on the ontological make up of both observer and observed.

Because all beings possess a human subjectivity, trans-specific communication is possible despite the manifest existence of physical discontinuities that separate them. Rather than seeing such a model as a form of representing nature, it should be understood as part of a practical attempt to engage with a web of ecological relationships.

This chapter on dog dreams is a central "hinge" of my dissertation. The four chapters that precede it are about ecological *aesthetics*, especially how they are expressed poetically, and engaged environmentally. The four chapters that follow it, by contrast, are primarily about ecological *cosmology*. In these, rather than tying ecological cosmology to the aesthetic, phenomenological, or practical contexts of engagement from which, I believe, it ultimately arises, I am concerned with understanding how such a cosmology is impacted by, and relates to, a social world that extends beyond the village and forests of Ávila.

As a link between a set of chapters that is concerned primarily with how ecological understandings are grounded in natural engagements and a corresponding set, that is concerned with how ecology is grounded in history, it is fitting that this chapter focuses on the relationships between dogs, jaguars, and the Runa. All of these beings are characterized by their central roles as mediators: dogs mediate between the world of the house and that of the forest; jaguars mediate between game masters and the Runa; and the Runa themselves mediate between the civilized pole of the Hispanic state and the "wild" pole of the Amazonian jungle.

**Perspectivism and Souls**

Central to perspectivism is the idea of the subjective Self or soul. Communication is only possible with beings that possess souls. For the Runa the Self—for which they use the Spanish word **alma**, or soul—is constituted interactively (see Basso 1992). That is, selfhood is founded on the capacity to perceive other selves and to act on those perceptions.[30]

Many of the concepts I discuss in this chapter—foremost among them, that of the soul—are extremely esoteric. Accordingly, Runa ideas about them are not canonized; individuals in

Ávila have diverging –and sometimes discrepant– ideas of what these concepts mean. It is therefore important to keep in mind throughout the discussion that follows that the examples of local exegesis that I present to get a sense for these concepts do not reflect some sort of "official dogma." Rather, they are attempts on the part of individuals, to make sense of these difficult concepts. What the various explanations have in common, I believe, is that they are generated by a –more or less– shared set of assumptions, aesthetics, and interests that they can illuminate.

The idea of an interactive soul is central to Runa understandings of how different kinds of organisms interrelate with each other semiotically. When I asked Ventura whether animals such as agoutis or dogs have a soul, he thought about this question for a moment before answering in the affirmative. They, "have a soul," he said, "in accordance with their own measure" ("**paipa tuputa almayu**"). Ventura's reasoning was the following: animals, such as a dog or agouti, are "sentient" ("**yuyaihuan**," with the ability to think, judge, or to react to circumstances) because of their ability to "become aware of" ("**riparana**," from the Spanish *reparar*, to reflect, to attend to, to consider) their prey. An agouti has the ability to become conscious of the presence of a dog and saying that it has a soul captures this quality.

Consciousness is located in specific parts of the body. Generally speaking, the agouti's seat of consciousness—its **yuyai**—is found in its "innards"; as Ventura explained, "it thinks from its innards" ("**shungumanda yuyarin**"). People are no different. I once heard a man berate his teenage son, who had stolen some batteries and money he had stashed in the roof thatch, by saying "inside, you don't have any reason" ("**camba shungupi yuyai mana tian**").

There are several parts of the agouti's body that serve as organs of consciousness. These include the bile duct (**jaya**), the sternum (appropriately named **yuyarina** or **rapiana**, reflex), and a small yellow-orange gland found near the intestines known as **rapiana muyu** (the reflex organ). These organs are used by the agouti to detect the presence of predators. It is because of the way these organs function that the agouti can be said to have a soul. Its soul-quality is interactive; the agouti is defined as having a soul because of its ability to detect other beings in the forest.

Consciousness is reciprocally defined and transferable. It is in this context that the Runa speak of transmigrations of souls and soul-loss. To continue with the above example, dogs are defined as conscious, soul-possessing beings because of their ability to detect prey beings such as the agouti. The consciousness of dogs can be increased—as defined and measured by their increased ability to detect prey—by administering to them the very organs that permit the agouti to detect the presence of dogs. When the agouti is butchered, the sternum is sometimes fed to the dogs and the bile duct is sometimes saved in order to pour the bile—along with other remedies to be discussed shortly—down the noses of dogs. By ingesting these sources of the agouti's predator-detecting, interactive Self, dogs fortify their own souls –a process that is manifested by their increased ability to detect prey.

Bile is extremely bitter. This is why it is called **jaya** (bitter) in Ávila. Potential medicinal plants are also judged to be efficacious based on their bitterness. The name of the hallucinogen **aya huasca**, or **jaya huasca** (which refers to a decoction of *Banisteriopsis caapi*, Malpighiaceae, sometimes with other plants as well) means "bitter vine." This decoction is also very bitter and its power as the quintessential consciousness-raising drug that permits people to interact with other souls is attributed to this quality.

In the same manner that the dog is administered the bile of the agouti, some men in Ávila have recounted to me how they have ingested the bile of jaguars and harpy eagles (**huamani**). These are the most potent predators in the forest and through their soul-substance, the Runa are able to increase their own hunting prowess. That this is intimately connected with the soul is evidenced by the fact that the act of drinking jaguar bile is one of the ways in which the Runa become were-jaguars (**runa puma**). As were-jaguars they become powerful in life and their soul goes to inhabit the body of a jaguar after death.

This ability to ingest substances in order to become more cognizant of other interactive selves is generalized in Ávila. For example, when deer are butchered, they are sometimes found to have in their stomachs a bezoar. This is fuzzy but hard ball about six or seven centimeters in

diameter that is known in Ávila as **rapiana muyu** (reflex ball). This is considered a seat of consciousness (**yuyarina**) for the deer. It allows deer to become aware of hunters and to run away swiftly to escape them. A deer killed by Hilario was found to have such a ball and he has kept it in order to smoke some of its scrapings, along with locally grown tobacco, in order to encounter deer more readily.

The concept **rapiana** is interesting because it points to the ways in which interactive links with other selves are established in a bodily fashion. **Rapiana** can be translated as "reflex." Orr and Wrisley translate it simply as a muscular contraction (1981: 80). One gets the sense that there is something involuntary and bodily about **rapiana**. Nevertheless, it is a form of knowing. For example, Juanicu's thigh began to twitch one day when I was at his house. Juanicu commented, "my leg muscle is contracting, Niculas must be coming" ("**changa tullu rapiachihuan, Niculas shamunga**"). Juanicu interpreted an involuntary contraction of his muscles to be a manifestation of his soul's interactive ability to perceive others selves—in this case, the soul of his son-in-law that was due for a visit.

Such forms of bodily knowing and reaching out to other selves are very powerful forces that can interrupt other, related ecosemiotic activities. Juanicu was in his hunting blind when, unbeknownst to him, his daughter Pasiona was bitten by the fer-de-lance (**yacu machacui**, *Bothrops atrox*).[31] He shot at an agouchy and later an agouti but missed both times. This was because his daughter was rolling over in pain (**vultiarana**). Without him fully "knowing it," his sensing of his daughter's anguish prohibited his "body" from concentrating well on the relationship he needed to develop with the animals in order to kill them. As Juanicu said, "my flesh didn't allow me to think well" ("**aicha mana ali yuyachin**").

Certain plant substances are used by different beings to increase their consciousness. For example, the tayra (**pandu**), a carnivore (resembling a cross between a dogs and a weasel) that also enjoys stealing fruits from people's gardens, ingests a branchless herb known as **pandu yuyu** (*Lycianthes* sp., Solanaceae) that grows as a weed in gardens. It does so in order to become con-

scious (**yuyarin**) of where in people's gardens papaya (**papaya**, *Carica papaya*, Caricaceae) and sugar cane are growing.

Papaya and sugar cane, like **pandu yuyu**, are similar in that they are branchless. The link between **pandu yuyu** and the crops that the tayra wants to eat is one of analogy and this connection conforms to the patterns of "metaphoric ecology" that I discussed in the previous chapter. However, this link is also closely related to Runa strategies of ingesting plant substances in order to increase their consciousness of other beings.

These Runa strategies of becoming conscious of other kinds of selves should be seen as part of an understanding of the links that can connect various beings in an ecosystem. As such, they complement the metaphoric bonds that link actors in an ecosystem that I discussed in the previous chapter.

The substance that is most important for establishing awareness is **aya huasca**. Shamans ingest this in order to enter into contact with different kinds of souls—be they of the dead, of other shamans, or of game masters. Because of this ability to permit interaction with the souls of other beings, the Runa define **aya huasca** as having a soul. In this sense, the decoction made from this plant is a mediator in much the same way as the sternum or bile duct of the agouti.

The soul (**alma**) is often equated in Ávila with **samai**. **Samai** literally means breath. As such it is related to the verb **samana** (to breathe, to catch one's breath). However, I generally translate **samai** as "life-breath" in order to highlight many meanings of this term that a physiological description alone cannot capture.

Like **alma**, **samai** is also an interactive concept that is closely associated with consciousness. People, the souls of the deceased, and animals all possess **samai**. For reasons that will become clear shortly, the **aya** (the spirits of wandering corpses) do not.

Because of their abilities to attract prey with their "thoughts" (**yuyai**), both the anaconda (**amarun**) and the jaguar are said to have a lot of life-breath. In Chapter Nine I document how the anaconda is seen to hunt using its thoughts. Here I will examine only the strategies of the

jaguar. According to Ventura, the jaguar uses its thoughts in order to fool or sedate (**upayachina**) people and dogs so that it can attack them. This is analogous, Ventura explained, to the way in which people use their life-breath to blow tobacco at storm clouds in order to abate rain ("**tamiata upayachingapa**," see Chapter Four).

To attract its prey with only its thoughts, the jaguar uses a technique similar to hypnotization. It crouches low and then raises its tail upright so that this is the only part of its body that is visible. It then moves its tail back and forth. The jaguar's prey is made dumb (**upayachisca**) by this movement and attracted by it as well. When the animal inevitably moves to investigate, the jaguar can easily pounce on its quarry.

Ventura referred to the jaguar's tail in this context as "its **dunduma**" ("**paipa dunduma"**). **Dunduma** refers to several kinds of cultivated and wild sedges that are found in Runa gardens. When these wave back and forth in the wind, they resemble the jaguar's tail. Several kinds of **dunduma** are considered to be very powerful plants because of the ways in which they can affect ecological relationships. For example, the chewed tubers of **pishcun dunduma** (*Rynchospora* sp., Cyperaceae) are mixed with **tsita** (*Tabernaemontana sananho*, Apocynaceae) and tobacco water and administered through the nose to young boys who hunt with blowguns so that birds will be attracted to them. In a similar fashion, the chewed leaves of this plant can be placed on the tip of a shotgun muzzle to attract game. Similarly, **rupai dunduma** (*Eleocharis elegans*, Cyperaceae) is burned in the hearth in order to make the wind blow storm clouds away. Bathing and splashing around with **jahuan dunduma** (*Cyperus* sp., Cyperaceae), by contrast, attracts storms.

The jaguar's life-breath is made evident by the use of **yuyai** in hypnotic techniques of attraction that function according to ecosemiotic principles. These techniques are shared by the Runa when they use plants like **dunduma**. They also use the same techniques when they employ their life-breath to attract or repulse different beings (including rain, which is understood in some contexts as a sentient agent) in the ecosystem.

That **samai** is a vehicle through which the soul can pass from one being to another is made clear by a Runa from the Puerto Napo region who explained to Osculati in the middle of the 19th century that the soul exits a dying person with his or her last breaths and enters into the body of an animal (Osculati 1990: 112). **Samai** is also a vehicle of soul/consciousness transfer from substances to beings. Powerful substances that can transform or terminate consciousness, such as dart poison, alcoholic beverages, narcotics, and medicines are all described as having **samai**. For example, during the period of my field work I had the opportunity to visit a Huaorani community living within the Yasuní national park about a hundred kilometers south of the Napo river. During my trip, I purchased a small quantity of locally-made curare to give to people in Ávila. The potency of curare diminishes over time and I was worried that if I did not distribute it quickly, it would no longer work. One man in Ávila explained to me that there was no need for concern. If I kept the curare in a tightly sealed container, its potency would not diminish because its **samai** would have no place to escape.

Like curare, alcoholic beverages such as manioc beer and its byproduct **vinillu**, as well as cane liquor, have life-breath. This is evidenced by the presence of bubbles that are created as part of the fermentation process.[32] These bubbles are the manifestation of the potency of these alcoholic beverages. As manioc paste ferments in the large vats in which it is stored, its potency increases as bubbles begin to rise. As Ventura explained, "it boils intensely and when it boils it too begins to ripen" ("**sinchi timbun, timbun ña pucan paipas**"). The **samai** of manioc beer is concentrated by covering the fermentation vats. This life-breath is crucial to the way in which manioc beer operates to make people drunk. Ventura likened it to the way in which a shaman can blow his life breath to strengthen a patient. Just as a sick person is revitalized by an infusion of life-breath from a shaman, so a person drinking manioc beer becomes drunk by ingesting the **samai** of beverage in the form of bubbles.

When I was living with Hilario's family toward the beginning of my fieldwork in Ávila, I also learned that the Runa thought of medicines as having **samai**. Several of the people in the

house, including myself, had been suffering from stomachache. To treat us, Ameriga made an extraction of macerated and beaten bark of a tree known as **aya cara** (*Guatteria* sp., Annonaceae). She prepared this in a large mixing bowl. As we were looking for a suitable cup from which to drink the remedy, her son Lucio covered the bowl of medicine with a leaf saying, "[otherwise its] life-breath will escape" ("**samai ringa**"). **Aya cara** is quite bitter, hence its name "bitter bark." This bitterness accounts for its ability to quiet those "snake-worms" that are present in the bellies of people suffering from stomachache ("**machacui cuica icsapi upayachingapa**"). However, when Ameriga turned to drink her dose of this remedy, she commented that it was no longer bitter because its **samai** had escaped. Hence, it would not be efficacious. Nevertheless, when it was my turn to drink the remedy, Ameriga joked that by ingesting it, I would turn into a black jaguar (**yana puma**).

The chain of associations that Ameriga and her family made regarding this plant is very revealing of local ideas of intersubjective communication. Like **aya huasca**, this plant is named "bitter" because its taste indexes its potency and, again, like the hallucinogen of the same name, bitterness is equated with the fact that it is seen to have life-breath. Ameriga's final joke, that, by drinking such a bitter and potent remedy I would be transformed into a jaguar, reflects ideas of how substances that are bitter and have life-breath can be potentially thought of as vehicles for the transfer of souls.

The image of breath is a medium through which the Runa understand communication and interaction to take place between sentient beings. Breath is normally invisible. However, there are two important ways in which it is made manifest to the Runa: smoking and blowgunning. Accordingly, these have become central to soul transfer and intersubjective communication.

When a person that is smoking exhales, breath becomes visible by virtue of the smoke it carries. This is one reason, it seems, why a shaman puffs on a cigar before blowing life-breath into the crown of a patient to impart strength. Underscoring the power of breath is the fact that an Amazonian hunter is able to shoot a poison dart from his blowgun as far as forty meters (Yost

and Kelley 1983: 200) with just one lungful of air. Even though the use of blowguns as a hunting weapon has declined tremendously in Ávila in the last generation, the blowgunner's awesome ability to propel darts with a mere breath serves as a potent image to visualize how shamans can propel soul substance long distances by using their life-breath.

Darts, like smoke, make life-breath visible and index its power. Imagery of shamanistic initiation, sorcery, and curing are all based on the blowgun (see also Erikson 2001: 101-102). Novices have darts "planted" in their bodies by shamans who insert them into their bodies –"just like planting plantain suckers," it is said– with the aid of tobacco smoke through the crown of the head. Shamans also detect and suck out darts that were sent by enemy sorcerers and are lodged in the bodies of patients. They can then blow these back into their own bodies to strengthen their soul substance or blow them back at the enemy shaman that sent them. Finally, shamans can direct their own darts at enemies. Shamans rarely admit to doing this to other people but they will describe defending themselves against attacking animals in this way (see Chapter Six).

**Personhood and Theory of Mind**

Sentient beings are defined as such because of their abilities to "know" the minds of other beings. It is only based on this imputed ability, the Runa believe, that they are ever able to understand other beings and the motivations that inform their actions. Indeed, for the Runa, the prospect of a world in which different kinds of beings could not perceive each other as subjects would be tantamount to a sort of "cosmological autism."

This is more than a fortuitous analogy. The autistic child lives in a world isolated from other people because of a cognitive inability to see people as subjects. He or she is unable to construct a "theory of mind" that can explain human actions in terms of the motivations, fears, and goals of other subjects (Baron-Cohen 1995).

The Runa are terrified of the prospects of "cosmological autism." Given that they think of ecological relations semiotically, life in the complex tropical ecosystem would be impossible

without the ability to understand the motivations of the various beings that inhabit it.

The fear of cosmological autism is palpable in a number of domains. For example, shamans are sometimes accused of stealing the "hunting soul" or **casariana alma** of men. The **casariana alma** is a kind of consciousness; "it places consciousness in a person" ("**shungu yuyarichin, yuyaita churan**"); it is "nothing more than life-breath" ("**samaillara**") or "life-force" (**causaillara**). This kind of soul provides the consciousness (**yuyai**) needed for hunting. Young boys often receive their **casariana alma** from their father or from a shaman. This is done by ingesting tobacco and **tsita** through the nose and receiving a concentrated breath of tobacco smoke-laden **samai** through the crown of the head.

Shamans can also steal the hunting soul. One way in which people do this is through physical contact at drinking parties. They can hug the victim, or pat them on the back (described as **cuyana**), or shake their hands for an extended period of time. This last method requires some explanation. Customary handshaking in Ávila, and in many other Runa communities, consists only of barely grazing the palms of the hands together. It is generally considered rude to clasp hands or to hold the hands for a long period of time unless one is asking an important favor of someone in which case the hands may be held throughout the duration of the conversation.

The effect of having one's **casariana alma** stolen is that one can no longer hunt. As Juanicu explained, "when one's soul is ruined, one lacks the proper mind to hunt" ("**alma huaglipi caserio yuyai mana tian**"). He continued to explain that the hunter becomes like a lazy dog that has lost the ability to track and chase animals and just stays in the house.

Shamans are motivated to steal the hunting souls of others as a form of a revenge that usually ensues during heated arguments at drinking parties. Two such accusations against shamans were made while I was in the field. In the first case, one man was said to have threatened to steal the hunting soul of a younger man during a drinking party. The older man had been quite drunk and a few days later came to apologize to the young man saying, "I didn't take [your] life-breath" ("**mana samaita apanichu**"). On a separate occasion, another man, also very drunk, threatened

one of his young neighbors one day saying, "I'll take your hunting soul" ("**casariana almata apasha**"). The wife of this young man recounted this to me and explained that it was motivated by the fact that her husband had killed a tapir but failed to give the older man meat. Tapirs are the largest neotropical land mammals and it is expected that their meat be generously distributed (see Chapter Nine). This older man, therefore, had some justification for feeling slighted.

When a shaman has "taken" the hunting soul of his victim, he can drink **aya huasca** and then impart it to someone else, usually a son, so that this person, in turn, can become a better hunter with it. People who have lost their hunting souls can attempt to recover them by having a shaman whip them with leaf fans or by having these shamans call (**cayana**) their souls back.

Young men, who are dependent on their hunting prowess to feed their growing family, seem to be the primary victims of this kind of sorcery attack. The **casariana alma** is a crucial aspect of the interactive self needed to be conscious of and engage with other sentient beings. With this aspect of the interactive self missing, hunters, in a certain sense, become "autistic." They lose their ability to treat prey-beings as subjects. Like an autistic child that cannot differentiate people from things, men, thus deprived of their hunting soul, cannot differentiate the animals from the environment in which these live. They therefore lose their ability to hunt.

That soul theft can cause a kind of "autism" whereby consciousness of other beings becomes impossible, is generalizable to other domains as well. For example, when visiting her relatives in Ávila, a woman took some liana sections of **aya huasca** from her deceased father's house back to Huiruno where she now lives. She was hoping that a shaman would be able to drink a decoction made from these in order to divine where her mother, who had become lost in the forest, was. Her brother became very concerned when he learned that she had taken cuttings from their father's **aya huasca** plant to another village. He explained to me that the shamans from that village could easily remove the soul of this plant. This soul is necessary for it to cause intoxication ("**jaya huasca machachina almata anchuchinun**"); the person that ingests this narcotic is "made to become aware" ("**riparachin**"), is "shown" ("**ricuchin**"), and is given understanding

("**yuyaita cun**") by means of the soul (**alma**) of this plant. Shamans will steal this soul in order to transfer it to their own **aya huasca** plants. This act enables their plants to be much more potent as a consciousness-enhancing substance. By this act of soul transfer, however, the original plant becomes "autistic;" because it no longer has a soul, it can no longer enable those that ingest it to establish communication with a universe of souls.

According to the Runa, a being that lacks a soul is not only "autistic," in the sense that I have described, but also pathological. The dead (**aya**) are such soulless beings. The **alma** imputes consciousness and the attendant ability to have empathy for other beings. When a person dies, however, the soul leaves the body. This **alma** of the deceased can inhabit the body of a jaguar, or it can go to the world of the game masters, or it can go to heaven (see Chapter Six). In all these cases, the identity of the individual remains connected to this soul. What is left is soulless. In Ávila, **aya** is used to refer both to the lifeless corpse as well as to the "ghost" that aimlessly wanders the earth bereft of its soul.

The fact that the **aya** has no soul makes it particularly damaging to people. It becomes "another class" of being ("**shican tucun**") and is no longer able to love people ("**runata mana llaquin**"). This is especially true of the relation it has to its family. It no longer recognizes them as loved ones. The **aya** are said to be doubly estranged from babies that were born after their deaths; they have no means by which to recognize them. These babies are therefore quite susceptible to illnesses caused by the **aya**. Although the **aya** lack consciousness and a soul, they wander the places they used to frequent when alive, trying hopelessly to reattach themselves to the world of the living. By doing this, they cause sickness to their family through a kind of *mal aire* known as **huairasca**. Because it no longer has a soul, the **aya** is not able to develop empathy. This is why it is incapable of loving its family.

The distinction between that which has a soul and that which does not, and how these two states of being are connected to motivation, intersubjective contact, and malevolence, can also be seen in the case of shamanic darts (**biruti**). As I mentioned earlier, such darts are markers of

**samai**. Shamans will send them to attack enemies by "charging" them with their life-breath and then blowing them in the direction of their victim. The life-breath provides the vehicle through which the dart can connect with the victim.

A **biruti** devoid of **samai** is like an **aya** devoid of its soul. It is a form of undirected malevolence. When a dart is charged with **samai** it is quite dangerous because it is directionally motivated towards a victim. After travelling for a time, however, these darts "tire" (**sambayan**) and they fall to the ground. Bereft of **samai** they can nonetheless cause illness when unintended victims step on them. Similarly, when a shaman dies, his darts are no longer controlled or directed by **samai**. They will fly off in all directions and can be inadvertently stepped on when they fall to the ground, spent of their energy.

Just as **samai** can be imparted through the crown of the head, so too can it be extracted. Sometimes adults punish children by pulling on a tuft of hair on the crown of their head until a snapping sound is heard. When this is done their "**alma**" or "**causai**" (life-force) escapes and they are left floating, "like a piece of balsa wood" (**balsashina**).

The idea that the crown is a portal through which the soul, life-breath, and consciousness can flow in and out seems to be inspired by the fact that this is the point where the skull is not fully fused in a young child. It was through this unfused crown that the **juri juri** demon secretly sucked out the brains of her child as analyzed in Chapter Three.

Describing how a jaguar delivered a lethal bite to one of the family's dogs, Delia commented, "**catina curunashtumandami ta' canisca**" ("it bit [the dog] with a **ta'**[33] on its animal-following crown"). Because the crown is understood as a portal through which flows of interactive soul stuff traffic, it is another source of consciousness and intersubjective connection. The jaguar, according to the Runa, is well aware of this and this is why it attacks its victims with a bite to this part of the head. That this bite is lethal has to do with the ways in which this part of the body –because of its importance as a mediator of soul flows– is intimately connected with the animal's strength (**fuirsa**).

Throughout this section I have compared Runa ideas of soul-presence and soul-absence to purportedly universal cognitive problems of empathy and autism. Although the parallels I draw should not be taken too literally, I believe that the similarities between these two problems—one residing at a cultural level and locally specific and the other, found at a cognitive level and universal—can be revealing of problems of empathy and intersubjectivity in general.

Analytically speaking, an important similarity between the psychological theory of mind humans innately carry and the cosmological empathy that the Runa attempt to cultivate is that neither model need be "true" to be effective. We can never "read" the mind of another person. We can never truly know what they think. Nevertheless all our interactions with other people are based on the "fiction" that we can. Similarly for the Runa, the attribution of a soul to other beings is a way to create a framework in which interaction is possible with them. Indeed, it would be impossible for the Runa to hunt successfully or to engage in any other kind of ecological interaction without establishing some sort of "theory of mind" for the myriad beings of the forest, which is flexible enough to allow access, yet able to explain differences as well.

The feats of "mind-reading" that the Runa attempt are more than acts of modeling, for they are important practical tools that are used to interact with different kinds of beings. The Runa's attempt to tap into the theories of mind of beings that are not fully understood, and to establish interaction with them based on these assumptions about their motivations, is truly ecosemiotic.

**Dreams, Souls, and the Challenges of Communication**

For the Runa, the question of whether beings have souls is ultimately directed at the problem of how people can establish communication with them. That is, it is an attempt to find commonalties among beings in the face of their radical ontological difference. The Runa goal is to dissolve what Descola (1989: 443) calls the "solipsism of natural idioms"—a condition that isolates humans from animals and spirits. They want to do this, however, without blurring the onto-

logical boundaries that exist between different kinds of beings. Because the soul is a central ecosemiotic concept, it is the locus for this trans-specific interaction.

Dreaming–for which the word **nuspana** or, less frequently, **muscuna** is used[34]– is a privileged mode of communication through which, via souls, such "semantic empathy" (1989: 443) among beings becomes possible. According to the Runa, dreams are the product of the ambulations of the soul. During sleep, the soul separates from the body, its "owner" –for which they use the Spanish-derived term **duiñu**– and interacts with souls of other beings. So that a person can wake up, the soul unites again with the body. To wake up is referred to in Quichua as **causarina** (to come back to life, to revive, from the verb **causana**, to live). It is this soul that imparts life to the body. A sleeping body is like a corpse (**aya**); it is lifeless and soulless.

Dreams are not representations of facts (which can be judged as true or false) but performative orientations towards goals and fears. That is, "the dreaming experience itself is 'performative,' in the sense that it is already part of the *doing* of something, and not merely the *description of the doing* of something" (B. Tedlock 1992: 7). As such, dreams are not about the future (or the past) but part of a single experience that spans temporal domains. Although the Runa clearly distinguish waking and dreaming states, these are closely intertwined. The Runa refer to the dreams of the previous evening as **cunan nuspana** –"the dreams of the present." The events that transpire between souls (**almapura**) during dreaming, and the subsequent daytime interactions between the "owners" of these souls (**duiñupura**), are two parts of the same experience

The vast majority of dreams in Ávila are omens that are interpreted metaphorically. Some of these images are very beautiful. For example, dreaming of a gust of wind moving across a manioc garden and shaking manioc plants as it passes through, augurs getting drunk. Wind makes manioc move as if drunk in the same way that beer made from these same plants will make the Runa stumble.

Dreaming of a fishing net (**lica**) augurs that one will be unable to cross a river because it has become swollen with rain. Just as nets are placed in the water to trap the fish that move freely

through this medium, so too will the swift currents of a swollen river block the passage of people through the water.

Most oneiric omens establish a metaphoric correspondence between domestic spaces, on the one hand, and forest spaces, on the other. For example, dreaming of a girl wrapped in a blanket augurs seeing a jaguar. The blanket is a metaphor for the hide of the jaguar. Both have patterned designs that cover a human essence; jaguars, underneath their animal skins, have human souls just like people.

Many of these omens are specifically related to hunting. Dreaming of harvesting cultivated peach palm fruits (**chunda**) augurs killing a woolly monkey. A peach palm raceme is of the same approximate weight as a woolly monkey. Furthermore, the oil-rich peach palm ripens during the same season in which the woolly monkey accumulates thick layers of fat. Having been present when **chunda** is harvested as well as when woolly monkeys are killed, and having partaken of the oily beer and fatty soups that, respectively, ensue from these activities, I can attest to the compelling nature of these images. When the Runa pull down the heavy racemes of **chunda**, they crash to the ground from high in the palm tree with a resounding thud. This is remarkably similar, in many respects, to the ways in which fatally wounded woolly monkeys crash to the ground after hunters are forced to climb trees to pull them down from the perches where they have died.

Other hunting omens are based on metaphoric correspondences between household objects and parts of game animals that become visible when they are being butchered. Dreaming of an old dented aluminum pot augurs gutting a game animal. When the organs are removed, the carcass appears dented or imploded (**tiallaulla** or **tiandarina**) because the organs are no longer creating pressure to expand the body cavity. Similarly, a dream of a couple of bars of laundry soap tightly packed together in factory-sealed cellophane wrap also augurs gutting a game animal because these resemble the way in which organs are tightly packed and flattened (**palalla**) as they are pushed tight against each other within the restricted confines of the visceral lining inside the

body cavity.

According to the Runa, these dreams operate as omens in the following way. During dreaming, the soul of the hunter ventures into the forest and kills the soul of a game animal. This dreamer experiences this event in the domestic/wild metaphoric format I have discussed. When the dreamer awakes, he knows that, as long as he tells no one of his dream, and he is alert and astute, he can go to the forest and find the now soulless animal. Because this animal no longer has a soul, it is "no longer wild" (**mana quitan**). In fact, it is "autistic"; it no longer has the ability to be conscious of other sentient beings. As such, the hunter can easily dispatch it.

Metaphoric connections between domestic and wild spaces, then, are not representations. Rather, they are perspectivally situated ways of experiencing certain kinds of ecological connections among different kinds of beings.

Not all dreams in Ávila are interpreted in metaphoric fashion, however. Some dreams, involving contact with specific identifiable individual beings such as a deceased relative, are interpreted literally. For example, if a hunter wounds or kills a were-jaguar, the human soul that inhabits this animal may well appear in the hunter's dreams that evening. Whereas the encounter in the forest is among "owners of souls," in this case between a Runa and a jaguar, the encounter in the dream is among the souls themselves. Therefore the were-jaguar in such dreams appears in its human form, as a person (see Chapter Nine). Dreams of the souls of were-jaguars in which their human identities are revealed are not metaphoric and they are not exactly omens either. Like omens, they are ways of experiencing an actual contact with another soul. Unlike omens, however, that moment of contact among "owners" comes before the dream and not after it. Hunters often do not know the meaning of omen dreams until after they have had a forest experience (see Chapter Seven). Similarly, one cannot know the true meaning of an encounter with a jaguar in the forest until it is revealed in the dream the following evening. The man that shot the jaguar did not know this animal was actually a were-jaguar until its soul revealed that to his own soul as he slept.

A process of "displacement" of metaphor seems to be taking place. In a hunting omen dream, an experience among souls is represented to the dreamer metaphorically, whereas in the forest the following day, the experience is played out literally when the man kills the animal. In a revelatory dream, however, the contact among souls in the evening is experienced literally by the dreamer, whereas during the previous day the soul of the were-jaguar is "disguised" as a jaguar. In some important sense, the jaguar is a metaphor of the person whose soul inhabits it.

This phenomenon of displacement is also evident when comparing different kinds of jaguar-related dreams and visions. Dreaming of a jaguar can augur an encounter with an **auca** ("savage") warrior. Many non-Runa Indians of the Upper Amazon use face paint and the decorations made with this are seen as analogous to the spots on the jaguar's hide. Furthermore, "wild" Indians are thought to stalk and kill the Runa in the same way that a jaguar can prey on people. By contrast, seeing a jaguar in an **aya huasca** vision does not augur encountering an enemy warrior. Rather, such a jaguar is a helper of another shaman and, as such, this vision is a metonymic extension of that shaman's power.

Dreams and visions are connected to waking states; together, in some ways they form an experiential continuum. As I will explain in a later section, whether and where metaphors are located along this continuum is dependent on the semiotic rules that pertain to different kinds of communication. Suffice it to say for the moment that the phenomenon of a displaced metaphor will be important for understanding how dogs dream.

**Dog Dreams**

Not only are dogs thought to dream, but also the Runa go through some effort to interpret these nocturnal phenomena. They take note of their dogs' vocalizations and movements while they are sleeping and, based on these, deduce what they are dreaming and what these dreams, in turn, portend. I first became aware that people were concerned with the oneiric activities of their canine companions after a jaguar killed all the dogs of Hilario's household (see Chapter Three).

This attack, and his family's attempts to make sense of it, has been pivotal in my own understandings of how the Runa relate to other beings. Accordingly, I return to it repeatedly throughout these chapters.

After the dogs failed to come back from the fallow, the members of the household spent much of the morning trying to piece together what had happened. Finally, they decided to search the area where the dogs were last heard barking.

They eventually found them. As Luisa later recounted, fresh, "big and wet" (**llatsallarucu**) jaguar tracks led the family to the bodies of their dogs. The tell-tale crushing bite marks on the head of each of the dogs confirmed their worst suspicion that the dogs had indeed been killed by a jaguar.

Nevertheless, there still remained two unanswered questions: 1) what *kind* of jaguar had caused the attack and 2) why had the dogs been unable to augur their own deaths? For the members of Hilario's household, the answers to both of these questions involved dreams.

Regarding the first question, Hilario and his family wanted to know if the beast that killed their dogs was a regular forest jaguar (**sacha puma**) or a were-jaguar (**runa puma**). According to Delia, forest jaguars tend to eat their prey whereas, "were-jaguars just bite [their prey] and discard [the bodies]" ("**runa puma canishalla ishtan**"). Hilario, later that day, echoed this opinion. Although some people in Ávila deny this distinction, claiming instead that one cannot differentiate between a **runa** and **sacha puma** based on their behavior, this clue was enough to lead Hilario's family to conclude that the killer of their dogs was indeed a were-jaguar.

That a were-jaguar had killed the dogs was not a fully satisfying answer. This was evident from the question that Lucio –Hilario and Ameriga's son– asked the following day when he learned of the news: "whose jaguar would bother [us] in such a fashion?" ("**pipa puma shina molestanga**").

As Hilario and his family prepared to bury the dogs where they had found them, they began to speculate as to "whose jaguar" was responsible for the deaths of their dogs. They imme-

diately suspected that this jaguar "belonged" to a powerful old woman that had recently died. Luisa remarked with some certainty, "the grandmother-jaguar [did this deed of] sorcery" ("**aula puma sagrasca**"). Hilario's family commented that one of this woman's sons did not follow the appropriate restrictions (**sasina**) after his mother had died. These restrictions include prohibitions against handling steel tools, such as machetes and axes, and eating food with hot peppers. When one fails to observe these taboos, the claws of the **runa puma** of the deceased become weakened. When these eventually split, the were-jaguar is unable to hunt game animals in the distant forests. Instead, it turns to easier prey such as the dogs and chickens of the village. The fact that the son of this woman had already had several conflicts with Hilario's family made it all too easy for them to blame him for the actions of his mother's **runa puma**.

As plausible as this initial explanation seemed, it was soon discarded in favor of an explanation based on much more reliable information. The evening after the dogs were killed, several of the family members dreamt of Hilario's long-dead father and therefore identified him as the "owner" of the were-jaguar. Ameriga dreamt of him wearing a hat; he had been given a large gift of game meat and asked Ameriga to put it away. Luisa also dreamt of him; she could see his testicles, she said. This is a part of the body that Runa men are normally very careful to conceal. In addition, she dreamt that his intestines were coming out of his anus.[35] She later dreamt of two calves a black one and a mottled one. She assumed that her father owned these in his afterlife existence.

Lucio also dreamt of his grandfather that evening. However, he did not immediately realize that this was associated with the attack on the dogs because he did not learn of this attack until the following evening. Lucio and his wife and daughter divide their time between their small house and garden in another part of the village and his parent's house, and Lucio was staying at this smaller house on the day that the attacks occurred.

When his parents and aunt told him of the attack the following evening, this was his response:

[…] **nuspa–s siris carca-**
I was just lying down dreaming

(*with rising intonation indicating sudden discovery*)

**yayarucu huañuta cas carca**
so it must have been late grandfather [that I saw]

•

**cuindasa asin**
[he was just] talking and laughing

**tiahuan**
there with me

•

**paini puriras can-**
it must have been him wandering around

Learning that a jaguar attacked the dogs, Lucio noted that he had dreamt of his deceased grandfather that very evening. In his dream he saw his grandfather alive, as a normal person and concluded that it must have been his soul, in jaguar form, wandering the forests and fallows near the house.

Because the were-jaguar's attacked the dogs for no apparent reason he was deemed inhuman. For this reason, Lucio remarked that the **runa puma** was worthless:

**mana vali**
[that] no good

Hilario agreed and added

**supai**
demon

(*with rising intonation, as if begrudgingly admitting that his father could be responsible for such a deed*)

**supai imata canga**
demon, what else can it be?

Hilario's sister Luisa elaborated

**supai tucuscaca** […]
transformed into a demon

And Ameriga interjected

**imata runa casa shina** (?) **tucu-**
how is it that, being a person, he could be transformed in that way?

Souls have human identities as revealed by their human forms and normal social interactions in dreams. Yet, as were-jaguars in the forest, they become another kind of being –demonic.

Lucio's oneiric contact with his grandfather and the presence of the jaguar in the forest are part of the same experience. Lucio speculated that his grandfather's **runa puma** was coming down for a visit, possibly just passing through –the proper abode of were-jaguars being up in the mountains, far from human habitation. This is why he dreamt of him at that moment; there was an actual contact of souls.

**ñucapas sina nuspas- capi**
the reason why I dreamt in that way

**yanga pasianga uraipima riras- canga snaca**
was that he must have been [passing through] on his way down to visit [i.e. from his normal mountain ter-

ritory], it suddenly occurs to me

Ameriga agreed

**uraman ris- shina casca nin**
yeah, that's how it must be when he goes down

Lucio then remembered a recent encounter in the forest with a jaguar and, given the circumstances and his dream, he came to the conclusion that this too was a manifestation of his grandfather:

**ñuca anam- sna tuparcani**
way up, I also encountered [a jaguar]

**chillatami carca**
it must have been him

•

(*with sharp rising intonation on "**anam-**" and "**mayáp-**" indicating tremendous distance*)

**ñuca anam- Clemente mauca mayáp-**
I was way up, right near Clemente's fallow

**mauca**
in the fallow

**chistupi carca**
he was right there

**cai partita**
actually, a little to this side of it

•

**pa-**
damn

**mana tucllachihuarcachu**
it didn't fire on me [i.e., my gun didn't fire]

**ñaja**
[this just happened] recently

**cai retrullata ima**
it was this here breech-loader , I don't know [what happened]

The fact that Lucio had no qualms about killing this jaguar, even after learning that it was the soul of his grandfather, is very revealing of the limits of a certain kind of empathy. Empathy –the ability to understand the motivations of other beings– does not necessarily entail compassion –especially when those beings inhabit different ontological realms.

The dreams of the various people in the household revealed with ironclad certainty, not only what kind of jaguar attacked the dog but also its specific identity. By contrast, the second question that the attack provoked –namely, why did the dogs fail to augur their death?– was never resolved in a satisfactory fashion.

Dogs, I learned, dream, and their masters, by observing them as they dream, can know what their dreams mean. As Ameriga commented:

**alcu' nipi ñuca ninasiquipi tiapi mana nusapanusca**
speaking of the dogs, while I was by the hearth, they didn't dream

**puñunurcama chi alcucuna**
they just slept, those dogs

**nuspaisiquicunaca**
and they're usually real dreamers

**ninata "huan huan huan huan huan" rajurca**
by the fire they [would usually] go "**huan huan huan huan huan**"

If, for example, a dog barks "**huan huan**" in its sleep, as Ameriga imitated, it will chase animals in the forest the following day; "**huan**" is the sound that dogs make when they are pursuing animals. If, on the other hand, a sleeping dog moves its forelimbs in a digging fashion it will excavate an animal burrow the following day. If, however, it barks "**cuai**," a jaguar will kill it the following day, for this is the vocalization dogs make when attacked by felines.

This last call is the one that the dogs failed to vocalize in their dreams and, much to the consternation of their masters, in this way, they failed to augur their own deaths:

DG: **chica mana huañununman carcaca**
so, they shouldn't have died

The realization that this tidy dream omen model had failed them provoked a sort of fatalistic existential doubt in the women:

(AA: *with indignation*)

[…] **sna imanami yachashun**
so, how can we ever know?

(*everyone begins to laugh*)
LJ**: imanata yacharinga**
how can it be known?

**huañun imapas**
death, or any other [tragedy]

**cunan runapas huañun imapas mana yachan** (...)
now, even people dying or anything else [bad], we can't know

(*in a serious tone*)

AA: **mana yachaipachu carca**
it wasn't meant to be known

In what follows I will discuss the semiotics of dog dreams in the context of the ways in which dogs and people interrelate. However, one thing that must be kept in mind is that such understandings are practical models. People use these to attempt to understand and predict events in the forest. As the exchange analyzed above indicates, there is not always a seamless connection between worldview and ecological practice (see Chapter Two). Rather, epistemological doubt is also part of the ways in which people try to make sense of nature. The Runa seem to be conscious of the fact that their models of how the world works are tentative. This is why I have taken great care to treat beliefs, such as those regarding dog dreams, as models. Rather than assuming that these represent factual evidence of an elaborate and rigid cosmology, I am interested in how such ideas grow out of aesthetic orientations and ecological and existential challenges, how people use them, and under what circumstances they reject them.

**Dogs and People**

After listening to Ameriga, Luisa, and Delia discuss dog dreams I realized that the interpretation of these kinds of dreams was a common practice in Ávila. What puzzled me, however, was that dog dreams were interpreted in a fashion that was very different from human dreams. Why, I asked, are dog dreams interpreted literally whereas most human dreams are interpreted metaphorically? This question has important ethnological implications because there have been two important papers on Amazonian dreaming (Basso 1992, Descola 1989) in which this distinction between literal and metaphoric dreams has been noted. Neither of these, however, explained how these two kinds of dreams are related and how they might be subsumed under one generative and explanatory paradigm. The curious and admittedly tangential phenomenon of dog dream

interpretation, then, can shed light on this question. In order to address it, I will explore the ontological status of dogs vis-à-vis humans as well as the nature of communication between humans and dogs.

What kind of a being is a dog? Dogs are seen to share many qualities of people. Like humans they are not considered animals. For example, Umberto, another Ávila man with whose family I stayed for some time, once commented to me with some disgust that like an animal ("**animalshina**") his puppy was fond of eating raw peach palm fruit; dogs, like humans, are expected to eat cooked food.

Like people, dogs can also become the victims of sorcery. Aggressive dogs that bite people are often viciously punished. One dog that was particularly aggressive in Ávila –it even bit me on the calf on one occasion– was eventually killed by neighbors. If a dog happens to bite a shaman, the victim might well retaliate through sorcery. Such attacks are said to be fairly common in Ávila. Knowing that Ramun, a young boy staying at Hilario's house when the dogs were killed, had been bitten by Cuqui, the oldest and most aggressive of the dogs, Delia, Luisa, and Ameriga teased him that he had killed the dogs through revenge sorcery:

DG: **Ramunpas sagras canga**
it's that Ramun that must have done that sorcery

LJ: **Ramunpas sagras canga**
it's that Ramun that must have done that sorcery

AA: **ayllupas huañu carca**
and [because of this] the victim's relatives also had to die

[…]

RS: **Luisami sagras canga**
no, it's Luisa that must have done that sorcery

LJ: **canmi sagras cangui**
no, you did the sorcery

Here Cuqui is likened to an enemy shaman. When Ramun attacked him, Ameriga joked, his "relatives" (i.e., the other dogs) also died. They were the inadvertent "collateral damage" of Ramun's shamanistic attack. In this sense, these other dogs resembled the families of victims of shamanic attacks that are harmed by flying shamanic darts because of their proximity to the intended victim.

As with people, the unmarked state of dogs is domestic. Ventura, as a child, became lost in the forest with his dog. The game masters –supernatural beings who are often described as white priests and land owners that control the animals in the forest (see Chapter Six)– were enticing him to come live with them. In order to accomplish this, they made both the boy and his dog feral, or **quita**; for a time both lost their domestic nature and became frightened of humans (see Chapter Six for a more complete description of this event).

Another similarity is that dogs, like people, also have souls, and in some contexts these souls are even thought to ascend to heaven.

Yet another similarity between dogs and people is that for male dogs and Runa hunters alike, sexual activity decreases their ability to be successful hunters (see Chapters Seven and Nine). Before his dog Puntero discovered females, Ventura says, he was a good hunter. Then he began to "play" (**pucllana**) with the bitch owned by Ventura's brother. Once Puntero began to be sexual, his hunting abilities diminished; now that he is, "getting the female" ("**huarmita japisa**"), Ventura explained, he can "no longer follow" animals ("**mana catina ushan**").

Many of the qualities of dogs, as well as how dogs relate to people, can be understood by looking at how they are seen to be related to jaguars. Like the Runa, dogs are both predator and prey, master and servant. This can best be illustrated by the way that dogs and humans are linked via jaguars.

Like jaguars, dogs are seen as potent predators. Their natural propensity is to hunt animals in the forest. Even when they are fed vegetal food, people euphemistically call it meat

(**aicha**) when talking to their dogs. This is true, for example, when people fell peach palm trees exclusively to feed their dogs soup made from the palm heart (**chunda yuyu**).

In a symbolic sense, dogs are also seen as potential predators of people. This can be understood by looking at how people understand the roles of jaguars and dogs in a special meal that is central to a ritual feast known as **aya pichca**, which is used by the Runa to send the **aya** of a recently deceased person away from the living. I attended one such feast following the death of Ventura's father Jorge.

This feast culminated when the **aya** of this man was "sent off" in the early morning after we had stayed up all night (this is discussed in some detail in Chapter Seven). We then returned to Camilo's house for a ritual meal that consisted of **chunda yuyu** (palm hearts).[36]

It was important that this food be eaten without hot peppers or salt, otherwise Jorge's were-jaguar could return to the house. The salt and peppers are thought to cause the claws of the **runa puma** to split, making him unable to hunt wild animals and driving him back to the house were he can more easily steal dogs and chickens.

Although the major function of the **aya buda** is to send off the **aya**, this is also the time when it is believed that Jorge's **puma** would go to the forest. As Ventura explained, "when the **aya** is fanned away, the soul also goes" ("**aya tulapi almapas rin**"). The soul goes to the mountains where it becomes a jaguar ("**intiru sacha puma tucungapa**"), the dog of the game masters. Indeed, it goes to turn into a dog ("**alcu tucungapa rin**").

Some of the **chunda yuyu** had been placed in Jorge's basket to be shared with people in the parallel world of the **aya** that he would encounter when entering his **pupu huasi**.

People were quite careful to keep dogs from eating any of the palm heart. Under normal circumstances, dogs and people are both given palm heart to eat. Indeed, one of the major reasons for felling palm trees is to feed puppies palm heart. In the case of this feast, however, if dogs were to eat the palm heart, Jorge's jaguar would, "in turn, eat" the dogs ("**randi micungaran**").

Eating palm hearts may be related to endocannibalistic rites associated with the con-

sumption of the remains of ancestors that were documented for the Quijos region in the early colonial period (Oberem 1980: 288). Long tubular shafts of yellow-white palm hearts bear an uncanny resemblance to femurs and other large human bones. Under normal circumstances, when palm heart is used as a soup base it is finely chopped. On the occasion of the **aya buda**, however, it is served whole in portions that resemble bones.

Furthermore, mythical man-eating jaguars (**mundu puma**) and crested owls (**ere**) refer to the human meat they eat, not as **aicha** (meat) but as **chunda yuyu** (palm hearts). The connection between these palm hearts and the dead individual is strengthened by the fact that they should come from the stands of peach palms that he had planted when alive. In this sense, they are connected to the dead metonymically. They are "his work" ("**paipa trabaju**"), as it is said. As such, they come from trees that, when standing, populate the landscape with memories of the dead (see Rival 1993).

The prohibition against dogs eating the palm heart indicates that an equivalence is made between this food and the deceased person. This is supported by the fact that Ventura used the construction "**randi**" (in turn, equally) when describing how his father's **runa puma** would eat a dog that had eaten the palm heart; if the dog eats Jorge's "bones" (my term) then the dog, in an equivalent fashion (i.e., **randi**), will be eaten by Jorge's **runa puma**. Dogs, then, who see palm hearts as meat, are the quintessential predators in that, like mythological jaguars and cannibalistic humans, they can see people as prey.

If dogs are seen as jaguars, jaguars are also seen as dogs.[37] Jaguars and dogs are considered to be very similar kinds of beings. As I indicated in Chapter Four, both search out the same remedies when they are suffering from stomachaches. Furthermore, despite their manifest role as predators, jaguars are also considered to be the subservient dogs of the game masters. As Ventura explained to me one day, "what we think of as a jaguar, is actually [the game master's] dog" ("**ñucanchi pumami yanchi, paigunapa alcu can**").

As I have alluded to throughout this chapter, the Runa also see themselves as jaguars.

Many Runa, especially those that have developed shamanistic powers, acquire a jaguar essence which gives them predatory power when they are alive and allows their souls to inhabit the bodies of jaguars upon death (see Chapter Eight). As were-jaguars, or **runa puma** as they are called, they become the "dogs" of the game masters. That is, they become subservient to them in the same way that the Runa, in everyday life, enter into subservient relations as field hands for the estate owners and priests who are the models for the game masters (see Chapter Six).

Another hint of the close relation between jaguars and people is the possibility, in some contexts, for intersubjective interaction between them that is unmediated by dreams or drugs. As I will explain in the section that follows, beings of lower ontological levels are usually unable to see the world from the vantagepoint of higher beings except through dreams or with the aid of hallucinogens. In certain contexts, people and jaguars are seen as being of the same ontological level. For example, jaguars are said to be frightened of people that have eaten large quantities of hot peppers. When they encounter people in the forest they are said to always make eye contact. If a person has eaten hot peppers, this act burns the eyes of the jaguar and the animal is repulsed.

I should also note that one of the ways in which people acquire jaguar souls is through an application of a jaguar canine or incisor tooth dipped in hot peppers to the tear duct. Jaguar teeth that are intact and have not yet developed hairline fractures contain the souls of jaguars. People can absorb this –with the aid of hot peppers- through the conduit of the eyes.

The fact that eye contact is possible between two kinds of beings seems to indicate ontological parity. Each can be aware of the other's point of view. This is bolstered by the fact –explored below– that looking at certain hierarchically dominant kinds of beings can cause death.

Just as dogs are thought of in terms of jaguars, jaguars, in terms of dogs, and jaguars in terms of people, dogs are also seen as metaphors for the Runa. For example, if one dreams of a dog barking or biting, people will get into a fight. If the sound of the dog barking is quite distant, others will fight. Similarly, a dream of being bitten by a dog augurs that one will be attacked by a person.

Finally, dogs, jaguars, and people are linked in a master image through the **runa puma**. When a person "with **puma**" ("**pumayu**") dies, his or her soul goes to the forest "to become a dog" ("**alcu tucungapa**"). The **runa puma** is simultaneously a person akin to the Runa, a potent predator like the jaguar, and the obedient dog of the game master.

Besides being metaphors for the Runa predicament of being simultaneously predator and prey, master and servant, dogs are also seen as metonymic extensions of people's goals and fears as ecosemiotic actors. Because they serve as advance guards, often detecting prey well before their masters can, dogs become extensions of humans in their predatory endeavors in the forest. They are also, along with the Runa, subject to the same threats of predation by jaguars.

In some ways, dogs are thought of as the "arms" of people. Although this exact image is not used in Ávila, it seems to be productive. Dogs are often compared to guns, the implication being that, like these "arms," both are extensions of human hunting abilities. Tools that are used for hunting, trapping, or fishing can become ruined (**huaglirisca**) unless proper steps are taken to correctly dispose of the bones of the animals. Generally speaking, bones of animals should be discarded under water. They are usually submerged down stream from where people collect water and wash in the creeks near the house. If one fails to do this, the gun, or alternatively the trap, that was used to kill the animal will become ruined. A similar logic applies to fishhooks. A young man became angered when his mother carelessly discarded on the patio the vomitus of his young child that consisted in part of the remains of fish that had been caught with a lure that I had just given him. He was concerned that the chickens that ran to eat this waste would cause the lure to become ruined. I did not give his comments much concern until one day, when I was visiting him several weeks later, he asked me for a new lure because the one that I had given him had become "ruined."

Dogs are also subject to such potential defilement. When Hilario's dogs killed a deer, they were given only the small bones to eat. The large bones were disposed of in water. Because in this case the dogs –rather than a gun or trap– had killed the deer, they could also become "ruined"

if such etiquette was not observed. Indeed, Hilario commented that, if they are fed the large bones, "they become ruined, their nose becomes stopped up" ("**huaglin, singa taparin**") and they can no longer detect prey. Dogs, then, in certain contexts are like guns. They are extensions –arms– of the Runa.

During early colonial times, dogs were also used as the "arms" of Spaniards as they attacked the Quijos. Oberem describes the use of these as follows:

> These "dogs of war" ("*perros de guerra*") […] are one of the "arms" ("*armas*") of the Spaniards that are the most dangerous for the Indians […] [I]n their battles with the Indians, the Spaniards, quite often, would use dogs because these, once trained, were extremely useful, especially in swampy overgrown terrain where it became difficult for the Spaniards to pursue the Indians. The Indians were so fearful of these dogs that they would already consider a battle lost if they knew of their arrival. And these, trained for combat and also to rip the Indians apart, were fierce like tigers (Oberem 1980: 66).

What is interesting about this portrayal is the ways in which dogs can be seen as weapons as well as feline "helpers" of their powerful masters. This is similar to the ways in which jaguars are thought of today in Ávila as servants of shamans and game masters and, as such, do their bidding by attacking enemies or hunting animals for them, respectively (see also Chapter Nine).

As extensions of their masters, dogs are also thought to take on their personal qualities. In Ávila, it is often remarked that the guard dogs of mean (**millai**) people are also mean and prone to biting passersby.

Dogs are also mediators between the outside world of the colonists and the local one of the Runa village. The dogs that the Runa keep are woefully underfed and quite unhealthy. Because of this, they rarely are able to produce viable offspring and the Runa therefore often turn to outsiders, such as colonists, to obtain pups. This dependency on outsiders for dogs seems to have been the case since at least the mid-19$^{th}$ century (Oberem 1980: 193). The Runa also tend to adopt the dog names of the colonists. For example, of the three dogs that were killed at

Hilario's, two had exotic names. The name Huiqui means tear in Quichua but seems to be derived from Vicky. Cuqui is derived form Cookie, or a hispanicization thereof. These –as well as others such as Lassie, Marquesa, Princesa or Quiteña– that are used today for dogs in Ávila, are the same names that circulate among colonists for whom Runa men often work intermittently.

As a link between native and outside worlds, dogs in many ways resemble the Runa who, as "Christian Indians" have historically served as mediators between the urban and the sylvan. Furthermore, Ávila men obtain dogs from the same colonists for whom they work as field hands. Here, like dogs, they too become, for a time, "servants" of their employers.

"Dogginess" is a specific kind of a relation. Although the term **huaihua** is used in Ávila to refer to pets and domesticates, this term is not used to describe dogs (but cf. Oberem 1980: 192). Rather, the image of the dog is a template for understanding crucial social and ecological relations. Regarding human relations to other beings in the ecosystem, the dog is both an objectification of human ecological communication and an extension of the human perceptual and communicative apparatus.

**The Semiotics of Transpecific Communication**

Communication between different ontological planes is not reciprocal. Dogs can "speak" directly to humans in the sense that people feel they can readily understand the meanings of all of their vocalizations. In Ávila, there is an entire lexicon of the language of dogs as understood by people. People imitate dog vocalizations and there is general agreement as to the meanings and pronunciations of these. The following are some examples of standardized imitations of canine vocalizations and their meanings:

**au**
after having detected the scent of an animal

**ja** or **hua**
following game

**a au**
after game has been treed

**ya ya ya** (*or alternatively* **yau yau yau** *or* **yag yag yag**)
when about to bite game

**huao**
confronting a jaguar but frightened

**cuhuai cuhuai**
when the dog is caught in the claws of a jaguar and about to be bitten.

**aya–i**
when the dog is bitten

**aya–i aya–i aya–i** (*in rapid succession)*
when the dog is bitten and in great pain

Although the Runa feel they can understand the language of dogs, under normal circumstances dogs cannot understand the full range of human speech. They can only understand the Runa when spoken to in simplified language. Dogs, for example, will respond when their name is called. They are also thought to readily respond to words such as **chini** (nettle); the Runa have conditioned dogs by whipping them with urticating nettles so that a branch of nettles placed in a door way, or the mere mention of the word **chini**, is enough to keep dogs at bay.

In order to understand the full range of human speech, dogs must be administered certain powerful plants: these include **lumu cuchi huandu** (collared peccary **huandu**, *Brugmansia* sp., Solanaceae), a canine variety of a very powerful narcotic also used by people, tobacco, and **tsita**[38] (*Tabernaemontana sananho*, Apocynaceae) which is also taken by people. Of all of these plants, the last one seems to be the most important and the administration of a mixture of any of these plants is referred to as **tsitana**.

The use of **tsita** has been reported in the literature as a remedy to treat dogs that have lost the ability to smell prey (Oberem 1980: 192). However, my observations indicate that in Ávila, this more limited goal is part of a larger attempt to create an environment in which communication with dogs is possible on human terms so as to convince dogs to become more "doggy" in ways that, ironically, resemble ideal humans. The goal is to give dogs advice and this is similar to the advice an older person will give a young child or godchild on how to live correctly; in both cases the verb "to advise" (**camachina**) is used.

The advice given to dogs is profoundly perspectival. Through the administration of **tsita** the Runa are trying to reinforce a human ethos of comportment that dogs in general are also thought to share; dogs, like all beings, see themselves as human, even if the particular dog singled out for attention has strayed from the ideal norms of human behavior.

Although the values that the Runa try to instill in their dogs through their advice are human, their expression will be canine. Like people, dogs should not be lazy. For dogs this means that instead of chasing chickens and other domestic animals, they should pursue forest game instead. In this sense they should also be like jaguars that hunt prey in the forest. Only weakened or invalid were-jaguars hunt domestic animals. In addition, dogs, like people, should not be violent. This means that dogs should refrain from biting people or barking loudly at them. Finally, dogs, like their masters, should not expend all of their energy on sex, for, as with the Runa, this weakens them through a kind of soul loss. Soul-containing semen passes via the female to the developing fetus (see Chapter Nine) and limits their abilities to be good hunters.

I have observed people administer **tsita** to dogs on several occasions. The following example that I observed at Ventura's house is typical. The night before, Ventura's wife Rosalina and his oldest daughter Meri prepared macerated **tsita** along with **lumu cuchi huandu** and the bile of an agouti and a paca. As mentioned before, the family dog Puntero had become quite lazy and stopped hunting, in large part, it was thought, because of his propensity to follow a neighbor's bitch. In the early morning Puntero was captured as he still slept. Sometimes the dog catch-

es wind of the treatment and will hide out in the forest or at another master's house. Puntero, however, seemed oblivious to what would befall him. The women then tied the dog's snout shut with a vine so that he could not bite them. Rosalina and her two daughter then firmly held the dog down (sometimes the dogs are hog-tied to stakes). Ventura then grabbed Puntero's snout with one hand and with the other he expressed a handful of the macerated remedy so that a liquid extract would drip down the dog's nose. He did this several times as he repeated

**ucuchata tiutiu**
chases little rodents

**atalpa ama caninga**
it will not bite chickens

**sinchi tiutiu**
chases powerfully

**"hua hua" nin**
it should say "**hua hua**"

This is a very unusual way of speaking. In the first line, **ucucha**, literally mice or rats, refers to the agouti that dogs are supposed to chase. **Tiutiuna** means to chase. As far as I know, this verb is only used to refer to dogs chasing prey and has no use in other contexts. The second line is an admonition not to attack domestic animals but to hunt forest ones instead. The third line encourages the dog to chase animals but otherwise not to run ahead of the hunter. The final line reaffirms what a good dog should be doing –finding game and therefore calling "**hua hua**." In this regard, the following phrase is sometimes added

**ama llullanga**
it will not lie

This refers to the fact that some dogs bark "**hua hua"** even when there are no animals present.

As Ventura poured the liquid, Puntero attempted to bark but because his snout was tied shut he was unable to do so. Afterwards, he was released. He stumbled away and flopped down on the ground and remained in a daze all day, moving only to the shade when it was too hot and back into the sun as the day cooled down.

This form of giving advice to dogs is quite similar in many respects to that given to young boys so that they will fish and hunt birds in the nearby gardens and fallows instead of engaging in idle play. Such advice to boys is generally accompanied by the administration of **tsita**, although generally without **huandu**.

When he was a young boy, Ventura once actually received the identical treatment as the family dog. He inadvertently lost the grip of the dog as his father was administering **tsita**. The dog scratched his father's hand. Because of Ventura's disobedience, his father, in turn, poured the same mixture he was giving to the dog down his nose. This mixture happened to contain **huagra huandu** (the tapir's **huandu**, another variety of *Brugmansia*) so Ventura became a good hunter of tapirs.

On one of my first trips to Ávila in 1994, I was asked to pour a **tsita** extract down the nose of a young boy so that he would become a good bird hunter. Curious, and oblivious to the fact that I had been asked to perform this function because I was considered an elder –that is, I was being considered a giver, not a receiver of advice– I too asked to be administered **tsita**. I did not feel any narcotic effect after this was poured into my nose. What I did feel –and I later learned that this sensation was also shared by others- was an immediate shot of tremendous pain inside my ears. It is possible that the pain in the ears associated with receiving **tsita** explains why dogs are able to "hear" the advice of people when administered this drug.

In many ways the advice given to children and dogs is similar; in both cases advice is given in association with the administration of **tsita** and in both cases the goal is to make the recipient a good hunter that will not be lazy. There is, however, one very important difference. When advising their dogs under these circumstances, the Runa use a construction –not employed

in other contexts– of an imperative in the third person. This is highly unusual; Quichua imperatives are generally only used in the second person. It seems that in order for humans to communicate with dogs, dogs must be treated as equal subjects. Yet dogs must simultaneously be treated as objects lest they talk back. This, it appears, is why Ventura addresses his dog as an "it" and not as a "you." And this also seems to be part of the reason why the snouts of the dogs are tied shut. If dogs were to "talk back," people would become objects of a canine subjectivity and they would therefore lose their privileged status as humans.[39]

The hierarchical relationship that obtains between dogs and humans is analogous to that between humans and spirit masters. In the same way that people can understand their dogs, game masters can readily understand the speech of humans. The Runa need only talk to them. This is evident in the ways in which hunters sometimes talk out-loud to game masters when they are in the forest. They will do this to demand game meat and rebuke the game masters when this is not provided (see Chapter Nine). Under normal circumstances, however, humans do not have direct access to the subjective world-view of spirit masters. For example, humans see animals in the forest as wild whereas from the perspective of the spirit masters these are actually domesticates. For instance, from the game master perspective, the gray winged trumpeter is a chicken and the peccary is a pig (see Chapter Six). Not only is there a difference in vantage point –humans see animals as prey, whereas spirit masters see them as dependent domesticates—but the correspondences between these two categories are rigorously metaphoric.

Just as dogs require **tsita** to understand the full range of Runa expression, humans ingest hallucinogens so that they can see the game master world literally, as these masters see it themselves. Under such circumstances, the Runa are able to see game masters as people and converse normally with them. They use this opportunity to cement bonds with the masters so that these, in turn, will allow them to hunt their animals. One important strategy of establishing bonds of obligation with the masters is through the master's daughters. Under the influence of **aya huasca**, Runa hunters acquire spirit lovers or wives (**ucu huarmi**, **sacha huarmi**) who will help them

access game meat via their fathers (see Chapter Nine).

The relationship between the **ucu huarmi** and the Runa is very similar to that between the Runa and their dogs. The Runa give advice to their dogs in the third person and, additionally, they tie their snouts shut, making it impossible for their dogs to respond. Similarly, an **ucu huarmi** never allows her Runa lover to address her by name; she will only use her proper name with other beings from the game master realm and never in the presence of the Runa. Indeed, the Runa know that, "one does not ask their names" ("**shutita mana tapurin**"). The Runa are only allowed to address their spirit lovers as *señora* (literally Mrs. but equivalent to Madam or Lady), a Spanish term of deference indicating their "dominant" position (see also Chapter Seven). If the Runa were speaking Spanish, the use of *señora* would be accompanied by a concomitant shift to the deferential *usted* form with its third-person-derived form of address as opposed to the more intimate *tu* form based on the second person. By prohibiting the Runa from addressing them directly, the game master's daughters seem be protecting their ontologically privileged perspective as spirits. This is analogous to the ways in which the Runa communicate with their dogs in ways that protect their own special position as people. At all levels, then, the ecological goal is to be able to communicate across ontological boundaries without destabilizing them.

The second/third person shifts visible in Runa/dog and spirit/Runa communication are part of a larger problem regarding the risks of intersubjectivity with certain kinds of beings. Although the risk entailed by a dog that entertains the perspective of its master may not be lethal, other related intersubjective contacts are; under normal circumstances if a Runa were to see the world from the subjective perspective of the dead (**aya**) or demons (**supai**), this would cause immediate death.

I will elaborate on this regarding the **aya**. Although these beings seem to be quintessential "non-persons," as I have already discussed, the **aya** see themselves as normal people. They are said to inhabit a parallel world and they visit the homes of other **aya** where they drink manioc beer just like people. Befitting of beings that are dead, they eat nocturnal equivalents of game

meat favored by the Runa. Whereas the quintessential arboreal game meat for the Runa is the woolly monkey (**churungu, chorongo**), the animal that the **aya** prefer to eat is the nocturnal and arboreal kinkajou (**cushillu**). From the perspective of the **aya**, the kinkajou is a woolly monkey. The parallel between woolly monkey and kinkajou is explicitly marked through nomenclature in the Bobonaza and Tena dialects of Quichua. In these, the woolly monkey is referred to as **cushillu** and the kinkajou as **tuta cushillu** –literally, the night's woolly monkey (see also Orr and Wrisley 1981: 122-123)

Under normal circumstances, people are unable to see the **aya**. Nevertheless, a strong smell, resembling that of **chunda** palm inflorescence sheaths that have recently opened, is diagnostic of their presence. They also assume the form of wind that can rustle through entire forests. Alternatively they can assume the form of a small white butterfly, known as **aya maripusa**, that congregates in large numbers on the rocky beaches of rivers. These are sometimes startled by men who come to the rivers to net fish at night. This, as well as other forms of contact with the **aya**, can cause an illness known as **huairasca** (affected by the wind). The cure is to be fanned with a bundle of leaves such as nettles. These leaves will break almost immediately at the point where the blade attaches to the petiole and this too is a manifestation of the presence of the **aya**.

Under normal circumstances, if one sees an **aya** as it is –that is, as it sees itself– one will die; only the dead can see from the perspective of the dead. Nevertheless, there are two circumstances in which people are able to see the **aya** with no ill effect: 1) they can be seen in dreams and they appear in this context as they were when they were alive 2) they can be seen as people by shamans taking **aya huasca**. Indeed, the **aya** are attracted to people that ingest this drug. They come and "stick to them" ("**llutarimun**"). To shamans under the influence of **aya huasca**, the **aya** will appear as a "normal living person" (**ali causa runa**). This, however, is only because **aya huasca** is a privileged medium of communication that allows the Runa to temporarily assume the perspective of this being. That this is perspectival and not inherent to the quality of the **aya** itself is evidenced by the fact that the Runa cook **aya huasca** outside, far away from their houses. This

is done in large part because the **aya** are attracted to **aya huasca**. The **aya** attracted in this fashion can cause harm because household members do not have the means to entertain the perspective of these beings in a healthy fashion –as is possible for shamans under the influence of **aya huasca**.

There exists a correlation between the ontological status of interlocutors and what mode of communication is used. Literal communication takes place when one being can entertain the subjective viewpoint of the other. Higher beings can readily do this vis-à-vis lower ones as is evident by that fact that people can understand the language of their dogs or that spirits can hear the supplications of people. Lower beings, however, can only see the world from the perspective of higher beings via privileged vehicles of communication such as hallucinogens that can permit a consubstantiality of souls.

Without special vehicles of communication, such as hallucinogens, lower beings understand higher ones only through metaphor. For example, what the Runa see as forest animals are seen by the game masters as domestic animals. Conversely, what the Runa see in their dreams as domestic animals will be experienced in the forest as game animals. In either case, there exists a metaphoric gap between the perspective of the masters and the perspective of the Runa.

Metaphoric communication also takes place when lower beings do not want higher ones to understand them. The problem of selective communication is a practical ecological one that is not necessarily limited to the metaphoric/literal distinctions that I am trying to draw here. This was made evident to me when listening to Narcisa recount her distress when she was faced with the challenge of trying to alert her husband of the presence of deer without, at the same time, alerting the deer to her own presence:

**pacha**
damn

**mashtiyu casa gustu**
if I had that thing [i.e., a gun], it would have been great

(*The name in quotations is pronounced with increased tension in the throat*)

**“Aleja—ndru” alillami caparircani**
“Alej—ndru,” I quietly cried out

**-na caparinacamanca**
after calling like that

**shu huarmica ña ripararca ña**
one of the does noticed

**ali–lla chiman siquín**
slo–wly, about-facing [i.e., about to run off]

**hua-**
but then again

**carica**
the buck

**mana ima ripararca**
didn’t notice anything

Narcisa was faced with the challenge of yelling loudly and softly at the same time in order to communicate the presence of the deer to Alejandro without scaring the deer off. In her imitation, at least, she does this by substituting increasing volume with increasing word elongation. Also, a certain tension is audible in her voice that seems to absorb the volume of the sound without decreasing the urgency of the message. By holding back her yell in this fashion, she attempts to communicate powerfully in a way that is, nevertheless, inaudible to the deer. Her attempts, however, failed. Being an unarmed female (see Chapter Nine) there was more empathy between her and the doe –who immediately heard her– than between her and the males; neither her armed husband nor the buck ever “noticed anything.”

Similar challenges of selective communication are approached using metaphoric speech –especially when the being that is to be excluded is of a different ontological status. As I already mentioned, when humans administer drugs to their dogs in order to give them advice, they refer euphemistically to the prey that they wish dogs to follow as small rodents (**ucucha**). Both the dogs and their Runa masters understand that the animal being referred to is the agouti (**sicu**). In the same way that the term **ucucha** refers to a large class of small animals that includes mice, spiny rats, tree rats, and mouse opossums, the term **sicu** refers to a class of large terrestrial rodents that are prized game items. These include the agouti proper (**sicu**), as well as the agouchy (**papali**) and paca (**lumucha**). These large rodents are "with masters" (**amuyu**). That is, they are owned and controlled by game masters (see Chapter Six). The small mouse-like rodents, however, are not. They are "just" animals. Game masters can be offended if the intention to hunt their animals is made known to them and they might withhold game from hunters if they find out. By using the euphemism **ucucha**, the Runa are able to disguise their intention of encouraging their dogs to hunt the game animals of the master.

I encountered a very similar use of euphemism when I went to visit Raul and Carmen, a young couple. Raul had just killed a large collared peccary (**sahinu**, **lumu cuchi**) as I could readily tell by the smoking racks (**mandaca**) piled high with prize hocks and cuts of drying meat that were already acquiring a golden-red glaze to them. Carmen served me soup with a large cut of meat and she also gave me a large portion to take home to the family with whom I was staying. As I was eating, Raul recounted to me how he had killed the animal. He was fishing in the Churu Yacu when a group of three of these animals came to scavenge for crabs in the water. He managed to kill a large male. This event occurred fairly early in my fieldwork and I was confused because, although the animal in question was obviously a peccary, he kept referring to it as an agouti –sometimes even as a baby agouti (**sicu huahua**). Just as **ucucha** can refer euphemistically to agoutis, so too can the term for agouti refer euphemistically to the much larger peccaries. Raul's reluctance to overtly name the peccary seems to be related to how the game master might

understand this. It seems that if the game master were to hear Raul speaking excessively of the animal he killed, he might be reluctant to allow him to kill more peccaries from his herds in the future.

For similar reasons, when people go hunting or fishing they never say so directly. Hunters just "go for a walk" (**puringapa**) and fishers simply "go to bathe" (**armangapa**). Overtly mentioning one's intentions can have disastrous consequences. For example, on a trip to a hunting camp with Hilario and his extended family, we met Oswaldo and his wife Julita on the trail. They asked Hilario's son Lucio where we were going and he politely evaded the question. When they asked me, however, I naïvely told them our exact destination. Later that afternoon, soon after we established camp, a powerful storm blew in and a branch of a large *Cecropia* tree almost fell on our shelter. Hilario later explained to me that the game masters had caused this storm because, by speaking overtly about our trip, I revealed to them our intentions.

One also does not mention that one will take **aya huasca**, for fear that the "master of the vine"(**huasca curaga**) will hear of this and become angered. Instead, one should use a euphemism such as **huayusa**. **Huayusa** (*Ilex guayusa*, Aquifoliaceae) is a mild stimulant that, like **aya huasca**, is prepared through decoction and is consumed at night.

**Conclusion**

I am now in a position to attempt to answer my originally question of why dog dreams are interpreted literally. In a metaphoric human dream, the Self, or **alma**, has a literal nocturnal experience that it then communicates to its owner, the person, via metaphor. The owner then lives this metaphor literally the following day –completing the experience that was begun the night before. Under these circumstances the metaphor exists in the relationship between what the soul experiences and how this is revealed to the soul's owner. A dog dream, however, is interpreted literally by the Runa because people are directly able to see the dog's soul experience events thanks to the privileged ontological status that humans enjoy vis-à-vis dogs. Regarding the ambulations of

their own souls, humans do not usually enjoy this privileged perspective. They generally see the activities of their souls as transitive, that is, as an object being acted upon or as acting on objects. Under these circumstances, they will see the soul's activities metaphorically. In the event that they experience their souls intransitively –that is, subjectively as part of the doing– they will then share the perspective of the soul and interpret their dreams literally.

Although humans see dog dreams literally, they simultaneously see the dogs themselves as metaphors for the human condition. As such, the metaphoric transformation –normally present in dreaming and its interpretation– is displaced to another plane. The dog, objectified and made transitive, is already the metaphor for the human and therefore dog dreams are no longer metaphoric but literal. Dog dreams, then, do not belong only to dogs. They are also part of the goals, fears, and aspirations of the Runa –their masters– as they reach out, through the souls of their dogs, to communicate with the beings that inhabit the forest world in which they are engaged.

# Chapter Six
# The World of the Game Masters

## Introduction

This chapter is about how the Ávila Runa form ideas of nature within contexts that extend beyond the confines of the forests they visit and the village they inhabit. In previous chapters I have presented how ecological models grow out of aesthetic orientations that stem from intimate engagements with the minutiae of biological processes. By doing so, I put aside for a moment the larger economic, political and historical context in which ecological practice and knowledge is embedded. I did so in order to isolate some of the various ingredients that comprise "ecological knowledge."

This dissertation is bracketed at either end by a focus on very diverse aspects of nature knowing. It begins with observations on an aesthetic orientation whose apparent sources of inspiration are forest sounds and movements that seem to take little cue from the world of people. The dissertation ends, by contrast, with reflections on several aspects of an ecological cosmology that is concerned with specifically social problems such as the nature of modernity and power. Such disparate approaches might well comprise two separate research projects which –each taken by itself—could lead to radically different interpretations of Runa ecological understandings. Yet, my point is that both views –one that looks to the source of ecological knowledge as a product of local ways of dealing with a non-human nature and the other, that looks at ecological knowledge as fundamentally engaged with historical processes—must be considered in tandem. The chapters between the first and the last attempt to show how these two views are indeed connected.

When people in Ávila engage with specific animals or plants –understood variously as resources, omens, agents, or objects of interest in and of themselves—they need not necessarily attempt to locate that interaction within broader contexts. In some situations, however, especially those pertaining to hunting, the dangers of distant forests, and the afterlife, the question of who

controls the beings, processes, and events of the forest becomes crucial. It is in these situations that the Runa tend to emphasize a view of "nature" as a mirror of the everyday social world (see Descola 1996).

Whereas the Runa live "above" (**jahuata**), these beings that control the forests and the animals that inhabit it live "inside" (**ucuta**). These game masters are referred to as the **sacha curaga** (the forest lords), the **aicha curaga** (meat lords), or, more commonly, simply the **sacha-guna** (pl., the forest beings), **curagaguna** (pl., the lords), or **amuguna** (pl., the bosses).

The correspondence between above and inside domains is rigorously metaphoric and perspectival. What, from the Runa point of view, are jaguars, are seen by game masters as their hunting and guard dogs. What the Runa see as gray-winged trumpeters, guans, curassows, and chachalacas –all prized game birds that are primarily terrestrial– are chickens of the game masters. What the Runa see as lethargic leaf-eating sloths clinging to tree branches are seen by the game masters as furry urticating caterpillars that inch their way along their house rafters. Armadillos, with their bony armor plates, near-blindness, and curious lack of incisors and canines, are seen as squashes by the game masters –hard-rinded and innocuously sessile. Peccaries are the domestic pigs of the **sachaguna**, and howler, woolly and capuchin monkeys warm themselves by the hearth in the game master's house just like Runa children; when a hunter chances upon a solitary monkey apart from the troop, it is because, like an unruly child, this animal has been sent outside by the game master for upsetting the pots of drinking water, for instance. Toucans—majestic black birds adorned with spots of brilliant red, white and orange plumage and a flamboyantly colored bill that they point upwards as they call from atop their perches—are the adored "flowers" of the nubile daughters (pl., **solteraguna**) of the game masters. All of these animals, with the exception of the dog/jaguar (see Chapter Five) are considered **huaihua**, a term that refers to pets as well as domesticates.

Similarly, the forests that the Runa walk are the fallows (**mauca**) of the masters. Just as the Runa return to their long abandoned gardens to harvest fruit from their planted stands of trees

such as **chunda (***Bactris gasipaes*, Arecaceae**)**, **pacai** (*Inga edulis*, Fabaceae-Mimosoideae), and **patas** (*Theobroma bicolor*, Sterculiaceae) and to hunt the wild animals that are attracted to them, the game masters draw on the resources of their "fallows" to feed their own "pets." For example, when the Runa find peccaries eating the fallen fruits of the **huapa** tree (*Virola* spp., Myristicaceae) this is because the game masters have released these "pigs" from their pens (**cural**) into their "fallows" to forage.

On one occasion when I was staying with Ventura and his family, I caught a brief glimpse of how the Runa seem to experience the correspondence between the wild animals they see and hunt in the forest and the underlying domestic nature of these same beings, as seen by the game masters. I had gone out to the forest with Ventura to collect plants. After a few hours, as we turned home, it began to drizzle. Ventura heard something and ran off up the trail, telling me to stay back and keep quiet. After a few moments a peccary approached on the trail from behind me. I assumed that it had not detected me because of the rain. When it finally did see me, it froze. We both stood there staring at each other for several moments before I flinched and it ran off. People with whom I discussed this incident explained that the peccary had approached me and not the hunter because I was unarmed, and therefore unthreatening to it (see Chapter Nine).

That evening I dreamt that I had a shotgun in hand near a muddy pig sty in what looked like one of the deforested colonist ranches that border Ávila territory to the east, toward Loreto. Suddenly, a young collared peccary entered the pen and began running around. I was unable to fire a shot at it because there were several Ávila school children inside the pen as well. Finally, the peccary approached me. It was staring at me from no more than an arm's length away on the other side of the fence. At that moment I felt an ineffable sense of empathy with this creature. Nevertheless, I knew I had to shoot it. However, the gun began to have mechanical problems and I was unable to operate it. I finally fired off a shot at point blank range that entered the neck of the pig and killed it instantly. I then picked up the pig's limp body and went back to Ventura's house, proud that I would have plenty of meat to be able to distribute.

My dream touches on several issues that are central to this dissertation. One is the universal problem of empathy with other kinds of beings, of which Ávila perspectival aesthetics is just one possible solution (see especially Chapters Three and Five). This dilemma is highlighted in my dream by a felt need to kill a being for which I had compassion. Like the Runa I too was faced with the problem of transforming a subject (a sentient being) into an object (meat to be distributed as gifts).

What is important about this dream for the scope of this chapter, however, is the way in which Ventura interpreted it. When I recounted it to him the following morning he observed that my dream of a peccary inside a pen indicated it was the game master that had allowed this animal to approach me in the forest the day before. The true identity of the peccary as a penned pig of the master was revealed through my dream.

That forest experiences could lead me to generate oneiric images in a metaphoric language that the Runa find compelling within their cosmological framework speaks to a potential for sharing –and co-constructing– world views that is rarely discussed. In Chapter Eight I will have some opportunity to explore how such propensities have resulted in the construction of an Amazonian cosmology that speaks to potent historical images.

The distinction between animals-as-subjects and animals-as-objects is an important one. Whereas in previous chapters I showed how the Runa use a perspectival model to understand animals as subjects, in the contexts I discuss in this chapter, animals are thought of less as agents and more as objects controlled by game masters. Accordingly, the Runa are more interested, in these situations, in understanding the actions and motivations of the lords that govern access to animals. As Brightman has noted for the Rock Crees of northern Manitoba, animals can be treated at different times as subjects and at others as objects, depending on the context (1993: 95).

In sum, if the material I presented in the previous chapter portrays the Runa as "psychologists," trying to "get into the heads" of animals by creating "theories of mind" for them, the material I present here portrays them as "sociologists" trying to understand the structure of that

"society of nature" in the forest (Descola 1994a). As "sociologists," their aim is to understand where its power lies and how to access it.

To this day, the game masters remain an inherent part of the forest landscape, even if they are not always readily visible. At times their presence becomes acutely manifest. Being captured by them is something that, on occasion, happens to people. For example, Ventura recounts that when he was about twelve he became lost in the forest south of the Huataracu River. He had been out hunting with his father. Tired after walking all day, Ventura and his dog lagged behind and lost their way. In the forest Ventura met a girl that he took to be his sister. Naively, he followed her down a road thinking it would lead home. Instead, it took him past a tame tapir and through a waterfall to the abode of the game masters. Inside, he was given manioc beer and fed meat and roasted leafcutter ants. He slept beside the girl, still innocently thinking she was his sister. Only later would he realize that "she had only made herself look like his real sister" ("**duiñu pan-icuintallata ricuri tucun**"). She was actually the game master's daughter and wanted to marry Ventura so that he would then be obligated to live "inside" forever. With the help of Ávila shamans, however, after five days with the game masters, Ventura and his dog were "released" (**cachasca**).

The game master's daughter continued to be Ventura's **ucu huarmi** ("inside" wife or lover)[40] throughout Ventura's youth. She would visit him in erotic dreams and **aya huasca** visions and Ventura attributes the enormous success he had hunting during this period to her gifts of game. Even after he married his "above" wife Rosalina, Ventura's forest wife continued to help him hunt. However, when Rosalina lost hold of a piece of meat she was butchering in the rain-swollen rapids of a stream, Ventura's **sacha huarmi** became offended and abandoned him. Without the help of his forest wife, Ventura's ability to hunt successfully is now greatly diminished. This example illustrates how the game masters occasionally impinge upon people's lives and how these presences leave their marks.

Although not all Runa have been captured so dramatically by the game masters, men will

often cultivate relationships with forest lovers or their fathers by ingesting **aya huasca** or through dreams. Such relationships are essential for securing meat. Besides the gifts of game provided by these beings, small hints of their domain are visible in everyday life. Sometimes when walking by waterfalls the Runa will catch the scent of food being cooked by the forest lords "inside." Sometimes their presence is also heard. For example, early one morning at Ventura's I was puzzled by the sporadic sound of distant water. Ventura remarked, "when the lord bathes at day break the waterfall cries" ("**paccha huacaran, punjayangapa curaga armapi**").

Before continuing with my discussion of the "sociology" of the parallel world of the game masters, I want to point out that the Runa do not always see the natural world as a mirror of the social. The term "**sacha**" (forest) is at times used in Ávila to refer to a realm devoid of the volitional control of beings. For example, although most illnesses are attributed to the malevolent acts of sorcerers, demons, or the spirits of corpses, some are simply said to come "from the forest" (**sachamanda**). One such example is **mija paju** (bronchitis). No volitional agent need cause this illness. I do not wish to imply that beneath some Durkheimian "ideology" by which a vision of society is projected onto nature, the Runa hold a "true" naturalistic view of the non-human similar to our own. Rather, I wish to point to the fact that the social attributes of the forest are not relevant in all contexts. Although I try to capture the logic of a system whereby nature becomes socialized, there is no single model whose formal generative properties can fully explain Runa conceptions of nature. And furthermore, there is no one perspective (e.g., cognitive, economic, constructivist, evolutionary) that neatly explains the myriad ways the Runa think about the forest.

A major difference between the world of the game masters as portrayed by the Runa and that of the Achuar homologue, is that the model of society that the Runa project on the forest is one that encompasses not only local relations of sociability (e.g., those related to kinship, the household, and the house and garden) but also the way in which that intimate sphere of domesticity is inserted into a regional and even national web of social, economic, and political relations. Whereas the Achuaran *polis*, or Ideal State, is the autonomous household and it is this "domes-

tic" image of society that they project onto nature, the Runa notion of *polis* posits local Runa sociability as part of a much larger regional system.[41] It is not surprising, then, that game masters are described as wealthy white priests and *hacendados* who live in cities inside the waterfalls of the forest. Or that they drive pickup trucks and fly airplanes. There are Runa that also live in this "inside" realm. Like their counterparts "above" they are simultaneously autonomous in their own houses but subservient to these more powerful masters in other contexts.[42]

The Runa tendency to understand the forest in terms of categories that extend beyond local relations of sociability is also evident in the hunting omens of dreams. As I analyze in Chapter Five, the Runa interpret most of these dreams metaphorically; dreams of the social realm augur events in the forest. Whereas among the Achuar, the social pole of such metaphoric correspondences is domestic and largely autochthonous, for the Runa the social realm projected onto the forest is often urban, chaotic, and multiethnic. For example, early one morning when I was staying at Juanicu's, his son Adelmo suddenly bolted out of bed, announcing loudly for all to hear, "**nuspani**" ("I've dreamt") before grabbing his shotgun and rushing out of the house. Later that morning he returned with a peccary. When I asked him what dream had prompted him to rush out into the forest and kill a peccary, he responded that he had dreamt of buying new leather shoes. The shoe stores in Loreto, the nearby colonist town, filled with shelves of leather shoes and rubber boots of all sizes, colors, and models, provide an apt image for the profusion of tracks left by a herd of peccaries at a mud wallow or salt lick. Peccaries, with their gashing canines, musky odor, fondness for mud baths, gregarious propensity to travel in herds, and omnivorous habits often represent outsiders or enemies for Amazonians. Like "real" people (in this case the Runa, as opposed to their enemies, the Aucas) they are very social. Yet they also seem to thwart the kinds of taboos that distinguish such "real" people from their enemies (e.g., Rival 1993). In Ávila, dream images of peccaries are now, fittingly, represented via the hyper-social image of the town, and its goods and inhabitants.

Similarly, at a hunting camp in the foothills of the Sumaco Volcano, a young man called

Fabian commented to me that he had dreamt of a well-stocked general store filled with things like rice and cans of sardines and tended by a young priest. He explained that this augured killing woolly monkeys. These travel in troops deep in the mountains, far away from Runa settlements. When found these provide a veritable cornucopia. They are relatively easy, once spotted, to hunt—usually several can be taken—and they are coveted for their thick layers of fat. Like the forests that these monkeys frequent, the well-stocked general stores are at some distance from Runa settlements. And, like the troops of monkeys, these stores offer a bonanza of food. Both the store and the monkey troops are controlled by powerful whites and, given the proper means, the Runa can have access to some of the wealth of both (see Chapter Nine).

How has it come to be that the Runa hold a traditional animistic cosmology (Descola 1994a, 1996b) that nevertheless reflects images that are decidedly non-traditional? I believe that this curious juxtaposition is due to the fact that Ávila has had a long history of involvement with larger political and economic systems while at the same time maintaining a large degree of autonomy in many respects. Despite the importance of regional systems, Ávila continues to have a local "subsistence" economy where virtually all the food that is consumed is gardened, gathered, fished, or hunted.

By contrast, other Quichua people living closer to urban centers and roads and are increasingly removed from this subsistence-oriented way of life (see Muratorio 1987). Their reflections on the nation, modernity, and power may not necessarily be tied to the idiom of ecology in the way in which they are in Ávila. Still other groups, such as the Achuar of the "ethnographic present" of the 1970's when Descola conducted his research, have minimal contact with the outside. National political and economic networks do not impinge heavily upon their daily lives and their ecological cosmology, in turn, reflects this.

The Ávila Runa, then, are in a unique position. Forest activities and ecological cosmologies have, for the time being, persisted despite a certain degree of integration into a regional system. Neither acculturation nor isolation characterizes their situation. This is why their under-

standings of the forest reflect both a complex history as well as the myriad, and often counter-intuitive, strategies by which that history has been harnessed locally.

## The Sociology of the Game Master World

I now want to turn to the sociology of the **sacha** world. That is, what kinds of beings inhabit this place, how are they organized, how might that organization have come about, and how do the Runa fit into that organization?

### *The Game Master as Curaga*

The most prominent inhabitants of this space are those described as **curaga**[43] or lord. These exhibit attributes of a variety of figures: the historical indigenous leaders of the Quijos region; a traditional Auca "big man"; a powerful Runa man; and, perhaps most importantly, a priest or hacienda *patrón*.

Initially, the image of a white or European **curaga** seems to be an oxymoron. However, I will show why this concept makes sense locally and how it might have originated.

The term **curaca** in early colonial Andean Quechua meant, "the principal or superior lord" ("*El señor mayor, o superior*") and, in its plural form, "the chiefs or nobles of the nation" ("*los principales, o nobles del pueblo*" (Gonçález Holguín 1989: 55). During the early colonial period, the Spaniards used the Arawakan synonym *cacique* to refer to the leaders they found in the Quijos region.[44] *Caciques* were hereditary leaders associated with specific geographical regions (Ordóñez de Cevallos 1989 [1614]: 431). Their position of authority became important primarily in times of crisis. They were also hierarchically nested; groups of lesser *caciques* would unite under the temporary command of higher ones (Ordóñez de Cevallos 1989 [1614]: 429; Oberem 1980: 225). At the time of contact, the Quijos region was united into approximately five chiefdoms. Each was composed of a loosely affiliated group of *caciques* that would unite under one paramount during times of war. Ávila or Sumaco (both names are used) was one such chiefdom.

This was composed of thirty or so *caciques* that inhabited the northern and western slopes and adjacent areas of the Sumaco Volcano, including the region where present-day Ávila is located. During the uprisings against the Spaniards of the late 1570s these were united under the "*cacique principal*" (chief lord) Jumande.[45] This system of chiefdoms or *cacicazgos* was dismantled towards the end of the 16th century as colonial appointed indigenous officials, known as **varayu**, supplanted them (Oberem 1980: 226-227).

The game master lords, as they are imagined today in Ávila, share in common a number of features with the 16th century **curaga**. They are organized in a nested hierarchy and the apical **curaga** is associated with Sumaco Volcano. Indeed the early colonial administrative unit, known as the *provincia de Sumaco*, seems to correspond roughly with the modern day jurisdiction of the game master lord. These similarities can be seen from the following myth that explains the scarcity of game in Ávila:

> There used to be a lot of game in the Ávila region. Then a **curaga** from Terere (a mountain island on the Napo River) came. He tricked the Sumaco **curaga** by getting him drunk. He made him sleep and then stole his horn. Then he went back down river and sounded the horn to call all the animals. At that time there were no large animals, such as the white-lipped peccary, down river. There were only small animals. Attracted by the call, all the game went down to Terere while the Sumaco **curaga** was still sleeping. That's why there's a lot of game down there. Even the woolly monkeys abandoned this area. When the Sumaco **curaga** awoke, he called the game with another horn but only some of the small game such as agouti, collared peccary, and curassows came back. Very few of the large animals such as the white-lipped peccary and woolly monkeys came back.

I will have the opportunity to analyze several elements of this myth at another moment. What I would like to point out here is that the Sumaco lord is thought of as a paramount in relation to the lesser game masters with whom the Ávila Runa cultivate relations that provide them meat. The Ávila Runa explicitly recognize this relation and it is also implied in the myth; the loss of the Sumaco lord's herds affects the abundance of game in the entire region. The territory controlled by the lord corresponds roughly to what in the 16th century was considered to be part of a geo-

graphical and administrative region known as the *provincia* or *gobernación de Sumaco*. Until 1580 or so, the lesser lords of the Ávila region were under, "the principal lord (*el caçique principal*) of the province of *Çumaco* who is known as Jumande" (Martin 1989 [1563]: 119).

The Runa also apply the image of the **curaga** to animal "societies" and in this way the qualities of this figure become naturalized. For instance, this term is often applied to dominant male leaders of troops; the large leaders of coati (**mashu**) troops or coati solitary males are referred to as **mashu curaga**. And, a large species of stinkbug (**pacu**) is referred to as the **curaga** of smaller stinkbug species. Other animals labeled **curaga** have qualities that specifically match those related to the political *caciques* of the 16th century. For example, the cinereous antshtrike (**cuchiquiri**, **guchiquiri**) is considered a **pishcu curaga** or "lord of the small birds" because of its propensity to lead mixed flocks of antwrens and flycatchers as they sally about in the low levels of the forest canopy in search of insects (Hilty and Brown 1986: 389). The **cuchiquiri** is known in Ávila as a leader of these mixed flocks –warning the flocks of any approaching raptors; "it leads around lots of small birds" ("**ashca pishcucunata pusasa purin**"). The qualities of this bird embody precisely that of the 16th century **curaga**. Mixed flocks are groupings of different species with no readily apparent hierarchy (e.g., they all forage for their own food). Nevertheless, the **cuchiquiri** emerges as a leader and protector in times of crisis by alerting the flock to the presence of predators. This is very similar to the ways in which the 16th century lords of the Ávila region represented loosely confederated groups—sometimes including those that spoke different languages—that united in moments of crisis.

Another "model" for the game master **curaga** is the big man, leader, or household head still extant, at least until recently, as a political figure of the various "Auca" groups and also considered as a potent image for what a powerful Runa shaman should be like. For example, in Ávila, the game masters are thought to sit on benches or thrones consisting of caymans and turtles.[46] Lucas Siquihua, a well-known shaman that died many decades ago, recounted to Juanicu how he had lived in the world of the game masters for two weeks. Upon first entering the house

of the game masters he was afraid to sit down because instead of the usual improvised bench of stacked bamboo sleeping planks (**huama**, *Guadua* sp., Poaceae) he saw instead a large cayman (**lagartu**) and, instead of the carved wooden benches, he saw a terrestrial turtle (**yahuati**). Such animal benches are seen as sources of shamanistic power by the Runa of Archidona (personal observation) as well as by those from the Canelos region (Whitten 1976: 149). Household heads of the Canelos Runa receive visitors while sitting on such benches (1976: 67) as do the Achuar (Descola 1996a: 34).

In Ávila, the only extant people who are thought to have a political organization in which **curaga** lords still figure are the Auca or non-Christian Indians. For the Runa these include primarily the Cushma (Cofán and western Tukanoan Siona and Secoya) and the Auca proper (Huaorani). Although the term **curaga** indexes an image of autonomous indigenous power, the lords of many "Auca" groups, it seems, derived some of their power from their ability to mediate effectively between locals and outsiders. Spiller (1974: 63), for example, describes how a Josephine expedition in the 1920s found that the leader of the Cofán was not only elaborately painted—in marked contrast to the "civilized" Runa—but also spoke Spanish. Similarly, the leader of the Eno (Ceño?, western Tukanoan Siona?), they discovered, was the only member of the tribe that could speak Spanish.

### *White Game Masters*

The Runa claim that the game masters are white has important antecedents in Amazonia. By the 18$^{th}$ century the Tupian Cocama of the Huallaga River region already had a vision of an afterlife peopled by powerful whites:

> I died, and once dead, I went to a beautiful place where I saw an ornately decorated house, and inside the seats were covered with cloth; I saw more than two Fathers like you who told me: it is not yet time for you to stay here, your relatives are calling, go back to comfort them (Maroni 1988 [1738]: 193).

Among many Amazonians of this period, the closest approximation to God that the missionaries could find was that of a powerful shamanic leader that controlled a parallel world of earthly abundance. Referring to the Tupian Omagua, Magnin states:

> They understand something of Heaven, that up there their souls go to be with their relatives; but they think that they will then have manioc in great abundance, meat and drink as much as they want, and, most important, a great quantity of women, which here the Priests, because they are stingy (*por mezquinos*), prohibit them. Of God they say nothing; only, yes, they add, there is one there, who subjugates all the rest; but they consider him a Sorcerer (*Hechizero*) (Magnin 1988 [1740]: 477).

Groups that were in close contact with missionaries, it seems, combined a traditional image of the afterlife as a world of abundant resources controlled by powerful shaman-like figures with one that corresponded more closely to a Christian heaven, albeit only in that those powerful shamans were white priests.

As the Tupian image makes clear, instead of God, the afterlife includes powerful beings, described by the missionaries as sorcerers, that can exert control over people even in the afterlife. In Ávila, today, game masters are also thought of as beings that can subjugate the Runa. In their ability to subjugate, however, the operative metaphor is that of powerful foreigners such as priests (who are often thought of as shamans, see Chapter Seven) or estate bosses. Indeed, game masters are referred to explicitly as **patrun** and as **amu**.

At first it seems ironic that the image of the priest and that of the estate owner should be combined in the game master given that these two figures often vehemently opposed each other. During the Jesuit and even post-Jesuit missionary era there was a continuous conflict between lay whites and priests as to who would control the Indians (e.g., Gianotti 1997: 100). The Runa were clearly conscious of this conflict, and they would strategically switch allegiances back and forth between the two groups.[47] Given that the Jesuit mission in many ways functioned as the Amazonian equivalent of the Andean *hacienda*, as Muratorio (1987: 111) has pointed out, this conflation is not so far-fetched. To this day, Ávila Runa are hired to work as paid field hands in

the various agropastoral endeavors of the Josephine mission in Loreto. In his capacity as an employer of indigenous labor, then, the priest is very much like an *hacendado*.

What does it mean to say that a **curaga** is white? It would be inaccurate, I think, to see the world of the game masters as a rigid caste society with Indians in one role and whites in another. True, it is believed that the game masters employ the Runa to tend to their herds and also as field hands. And they are also seen as employing modern technology usually associated with whites such as airplanes and pickup trucks. But the wives of game masters also tend to chickens in the same way that Runa women do. True, the forest lovers, as mentioned in the previous chapter, must be referred to as *señora*, a term of deference that the Runa normally use only when addressing non-natives. But these same lovers have the physical attributes of a beautiful, long-haired Runa woman. In other contexts, the game masters are portrayed as if they were Runa without focusing particularly on "white" attributes. For example, they drink manioc beer, a beverage that many outsiders find repulsive. They also have hearths, live in thatch covered houses, eat game meat, and hold weddings in the same way that the Runa do.

It must be remembered that attributes of whiteness are just some of several possible indices of power. Game masters are not "White" in a racial sense –they are powerful and they occupy a certain place in a hierarchical organization and this status, in part, has come to be associated with the authority that white attributes confer (see Chapter Seven).

***Hierarchy***

The world of the game masters is one of tremendous hierarchy that resembles in some ways national society and the place of the Runa within it. A rubber boss on the confluence of the Villano and Curaray Rivers, writing in 1913 states:

> How is it that the white inhabitants of these towns secure the services of the Indians? The answer is very simple: The Indian serves the white man because he believes that he is obligated to do so. The Indian's ignorance is such that he does not even suspect that individual freedom can exist and therefore they believe that

they are all slaves of our race (in Porras 1979: 19-20).

This boss' statements certainly reflect wishful thinking on the part of a member of a class of people hoping to secure Runa labor. I certainly did not encounter, by any stretch of the imagination, the attitudes of servility or humility that he portrays. Yet there is something to the fact that the Runa have accepted as natural certain notions of hierarchy. That this is so is reflected in their cosmology. In the 1840s, for example, Osculati observed in the Puerto Napo region that the possessions with which the Runa were buried included the wooden troughs (**batea**) with which gold is panned (Osculati 1990:114). At the time that Osculati wrote, the Runa of Puerto Napo panned gold in order to fulfill tribute requirements to the government (see Chapter Nine). Tribute, it seems, was also thought to be paid in the afterlife. This may be why the dead were buried with the tools they needed to procure payment.

Another indicator of hierarchy is that, as mentioned in the previous chapter, after death, Runa souls are thought to inhabit the bodies of jaguars. Although the jaguar is the most awesome Amazonian predator, it is simultaneously seen as the dog of the game master; Runa were-jaguars, then, become servants of white masters in the afterlife.

**The Geography of the Sacha World**

The game master world is full of wealth and free of suffering. In the afterlife the Runa aspire to go there because in it they will have an abundance of food and beer and they will stay forever young. Clearly this is a kind of utopia. Yet this space is also thought of as hierarchically structured and, as I have shown, the Runa often imagine themselves as inhabiting it in a subordinate position. That the Runa seem to embrace a hierarchically ordered afterlife is not readily explained by focusing on indigenous subversions of colonial ideology.

A more nuanced version of how people incorporate colonial ideas can be gleaned from an exploration of the "geography" of the game master realm. What kind of space is it? Where is it located in the landscape? What are its moral contours? What is its architectural design?

***Paradise***

The utopian qualities of the game master world are related to Catholic notions of paradise in interesting ways. The missionaries were concerned that Indian beliefs about heaven were much too similar to their worldly objectives and that both often flew in the face of Catholic moral norms. The Indians thought of the hereafter as an endless party, the missionaries asserted: "Thinking only of battles [?] (*chubas*), big animals [?] (*gamitanes*), beer drinking (*massatos*) and white-lipped peccaries; fashioning an idea of Heaven according to that manner, thinking that there would be no lack of axes, beads, monkeys, battles [?] (*chaburassas*), whistles, and drums […]" (Magnin 1988 [1740]: 490).[48] Not only would the Indians sing and dance in the afterlife but the missionaries also feared that they also looked forward to parading with the heads of their enemies:

> They say that in the other life they find great pleasure in eating, drinking, dancing, etc. And for their feasts they take heads (*cortan cabeças*) in order to dance with them with large quantities of drink, because that is what delights them most in this life, and they do not want to be without it in the next (Figueroa 1986 [1661]: 282).

The Indians, in addition, thought of the afterlife as a place where they could escape the moral order imposed upon them by the missionaries. As Magnin writes: "they think that there they will have manioc in great abundance, and meat and drink as much as they wish, and above all, a large quantity of women, that the Priests, on account of their stinginess (*por mezquinos*, [see Chapter Nine]), prohibit them from having" (Magnin 1988 [1740]: 477).[49]

Missionaries working among the Runa today share these same concerns. Father Pedro Porras describes the Runa idea of the afterlife as a kind of muddled idea of paradise. It is a "beautiful inferno" he says, with enormous riches of worldly resources. It has "rivers that contain more fish than water" and, most importantly, "astronomical quantities" of manioc beer (Porras 1955: 153).

How do Amazonians connect local ideas of the utopian afterlife with Christian versions? In Ávila today there is certainly a belief in a Christian paradise. This is a place where Runa souls

go to be with **Yaya Dyus** (Father God). In addition, dreaming of Quito augurs that one will soon die and ascend to heaven. Just as Quito is high in the mountains, so too is heaven, in the sky. Furthermore, the dead are sometimes buried with the beautiful (**gustu**) showy red flowers of *Kalbreyeriella rostellata* (Acanthaceae), a plant referred to by many simply as **sisa** (flower). This is done in the hopes that "with it, [the soul] will be able to ascend to heaven" ("**chaihuan cieluman sicangapa**").

The idea of a Christian paradise colors the notion of the game master world but in no way negates it. Indeed, in many ways these two spaces are seen as quite separate by Amazonians. Different souls of the same person can inhabit different kinds of afterlives at the same time. The Jesuits found this very confusing:

> Where they will end up after death, no one can say for sure: some say in heaven, others in who knows what region underground, others in other parts where they amuse themselves by eating, drinking, and wandering around, since they cannot imagine any other form of eternal bliss (*bienaventuranza*) (Maroni 1988 [1738]: 173).

This seeming "confusion" is also evident in Ávila where people hold simultaneously that souls become a jaguar, a person in the game master world, and a being that ascends to the Christian heaven. This confusion is resolved when one understands that people can have a multiplicity of souls and that some are more or less important depending on the relevant context. The Amazonian notion of soul is very different from the Christian one. As I described in Chapter Five, even though the Runa use the Spanish term **alma** to speak of the soul, they attribute to this concept qualities that are very different from the meaning that this word has in Spanish. What the Runa refer to using this word is an ability for intersubjectivity with different kinds of beings. It is the seat of personhood, but only in so far as personhood is defined by a capacity to share a perspective with other kinds of beings. A soul indexes an ability to see the world from a particular perspective. As an ability, one can acquire souls (e.g., a hunting soul, a jaguar spirit), transfer them (if one is a shaman), and also lose them (via sorcery). This multiplicity permits the Ávila

Runa to form cosmologies that are in dialogue with Christianity. Slippery concepts, such as **alma** in Ávila, exist in a charged Catholic milieu. Indeed, they thrive there because they can simultaneously capture elements of Catholic power and address local concerns that Christianity cannot. The presence of the concept **alma** in Ávila, then, is not a product of acculturation. Rather it is a product of a kind of dialogue by which natives attempt to access a variety of perspectives and sources of power.

### *Hell*

The profound discrepancies that exist between Catholic and game master utopias can be seen by examining how the world of the game masters is connected to ideas of Heaven and Hell and how the Runa see the domains of the Catholic and the forest to be related. People in Ávila often remark that, "the dead are free" ("**huañugunaca luhuar**"). By this they mean specifically that in the world of the game masters, the dead can escape Judgement Day (**juiciu punja**).

The term **luhuar** is derived from the Spanish word *lugar*. Its primary meaning in that language is "place." It also is used in the phrase, "*tener lugar*," (to have the time or opportunity to do something). This phrase is infrequently used today in Ecuadorian Spanish. However, the meaning of **luhuar** is related to "*tener lugar*." **Luhuar** often refers to having a period of respite from labor or work obligations (**trabaju**). In Ávila, work can often be seen as a source of suffering. In this context the term **turmintu** (from Spanish, *tormento*, meaning anguish, oppression, suffering) is used. The afterlife, above all, is seen as a time and place where one can be free of suffering, free of torment.[50]

The idea of escaping worldly **turmintu** by going to the afterlife can be illustrated by the following legend

> A white trader (**patrun**) came to Ávila to exchange clothing and cloth for **pita** fiber (*Aechmea* sp., Bromeliaceae). He advanced a large amount of these items to one Runa family saying, "become indebted to me" ("**debiachihuai**"). The family accepted and incurred a debt much larger than they would ever be able to pay in

> fiber. Meanwhile, in order to improve his fishing abilities, the Runa man had been cultivating a relationship with the lords of the rivers (**yacu curaga**) by ingesting a variety of riverbank herbs. These masters live underwater and appear to be like people. They have abundant food and drink and live in communities. At night, however, they take off their clothing and turn into anacondas. They also keep pet jaguars. Because of his debt, this man, however, ingested the herbs a fourth time –one more time than is usually prescribed to become proficient at fishing. He additionally gave it to his entire family with the exception of two boys who were out bird hunting. When the trader returned to collect his debt, loud thunder was heard and the entire house site turned into a lake. Only the coals of the fire (**nina puchun**) that were floating on the water's surface remained. The trader was unable to find the family so he dove under water to search for them. There the anaconda ate him. All that remained of him were his lungs (**yura shungu**, also referred to as **balsa**) that floated up to the water's surface. The two boys that had been hunting went to another lake, each imploring, "father, take me with you" ("**yaya pushahuai**"). They then also went to live with their family underwater. Nobody dies in that realm.[51]

Although the game master world is seen as a paradise free of suffering, most people are nevertheless not willing to give up their worldly lives to move there permanently. There are, however some exceptions. On a visit to San José de Payamino in 1997, I was told that a woman from the community had disappeared in the forest about three years before to escape here oppressive husband. This was sparked by the following event: she had found a giant terrestrial snail (**sacha churu**, *Bulimus* spp., Bulimulidae) that she brought her husband. Among the Runa of Ávila and San José, resources that are collected in the forest such as snails and mushrooms are seen ambiguously as both delicious snacks and denigrated famine food; people enjoy these in the intimacy of their homes but are reluctant to share them with guests. Presented only with a snail, her husband became angered, saying, "is that all you give me to eat?" The woman was so enraged by this abusive remark that she abandoned her husband and went to live with the game masters instead. Since then she has appeared twice in her husband's dreams, still angry about his remark. In these dreams she repeats to him that, "we, the game masters, will no longer give you meat."[52]

Although the domain of the game masters is seen as a kind of paradise because it is free

from God and his punishments, the Runa do not think of the relation between God and the game masters to be an antagonistic one. Although God has no jurisdiction over the domain of the game master, the souls that go there, several Runa stress, do so with the explicit permission of God.

***Sin***

Although the Jesuits were concerned that Amazonian ideas of the afterlife were based excessively on worldly concerns, at least, they conceded, the Indians had *some* sort of an idea of an afterlife. What bothered them more was their sense that the Indians were quite good at constructing utopias but they were seemingly unable to imagine dystopias (Figueroa 1986 [1661]: 283). It has been a source of serious concern for missionaries, stemming back to the Jesuits, that Indians were unwilling to conceive of damnation in Hell as a form of personal punishment for worldly sins. In fact, many have observed that the Runa do not think of punishment in Hell as a concept that applies to them (Gianotti 1997: 128; Oberem 1980: 290; Wavrin 1927: 335). For the Runa, Hell is a space that is reserved for non-Indians (see also Maroni 1988 [1738]:) –specifically for whites and blacks. As Wavrin explains, regarding the Runa, Hell is reserved for whites as a kind of punishment because they reject indigenous knowledge, especially because they do not believe in sorcery or what is seen under the influence of narcotics (Wavrin 1927: 335; see also Gianotti 1997: 128). Blacks, in Runa cosmology, are already cursed beings. Evidence of this is their dark skin that has been burned in the fires of Hell (Avendaño 1985 [1861]: 152; Orton 1876: 193; Colini 1883: 296). For the Runa then, Hell is only a place where *others* suffer. The Runa, Gianotti notes, are capable of understanding divine retribution for personal transgressions but only in the present life as a sort of shamanistic reprisal. They cannot be threatened by the fear of Hell (Gianotti 1997: 129).

The lack of a concept of Hell as a space applicable to the Runa is, I believe, due to subtle, yet far-reaching, differences between Runa and ecclesiastical understandings of selfhood, agency, and, by extension, misfortune and sin. I will illustrate this through a variety of examples.

In May of 1998 Padre Mario, at that time the resident priest in Loreto, made a trip to Ávila Viejo—one of several he made each year—to hold mass and listen to confessions. Two elderly women from the house where I was staying went to confess. As they later told me, their confessions were centered on the drinking that led to misfortunes.[53] One woman fell while drunk and seriously injured her hand and the other got into a fight with her husband and was beaten and suffered several injuries. Listening to them it became clear that drinking had only become a "sin" when it led to personal misfortune. There was no sense of personal accountability for moral transgression and, therefore, no reason, in their minds, to be punished. If they had not been injured they would not have confessed to drinking. The injury was what had made drinking a sin, not the fact that drunkenness itself was sinful.

Two other examples will illustrate this point that individuals in Ávila are not seen to be accountable for their misfortune. During the time I was in the field Juanicu was attacked by a giant anteater (**tamanuhua**) and almost died. He was collecting worms in order to fish in the Bishinu Yacu when his dogs began to bark at an anteater. He caught up to the dogs and shot at the animal many times but the powerful animal was unfazed. When Juanicu then struck at it with a stick the **tamanuhua** became enraged and came after him. As Juanicu backed away he collided with a tree and stumbled forward to within striking range of his formidable opponent. The anteater reared up onto its hindlegs and lashed out at him with its enormous claws. Juanicu was grazed but managed to get another shot off at the animal. The anteater was unstoppable. It slashed deeply into Juanicu's upper arms and legs and also grazed his back and an ear. Juanicu's son Adelmo was finally attracted by the noise and ran to his father's help. Although bleeding profusely, Juanicu was ultimately able to defeat this animal by shamanistic means: "he blew with his life-breath and ensorcelled the animal" ("**samaihua pucusca**, **sagrasca**"). With that, the animal tired a bit and Adelmo was able to kill it with a shot from his breech-loading gun.

In his descriptions of this event, Juanicu alternated between blaming the attack of the giant anteater on a rival shaman with whom he has had an on-going feud and, more mundanely, on the

dogs that led him to the animal, for they were supposed to have stayed at home. What is interesting is that Juanicu never blamed himself for this misfortune, nor did others ever attribute his misfortune to his specific activities. Personal agency and the attendant culpability that this confers are not thought of as categories that can explain misfortune; anyone can be at fault but Juanicu. If individuals are not considered responsible for their misfortunes, it is very difficult to see how they might be held accountable for their sins.

In another example, a young Ávila man was killed while visiting Huiruno, a neighboring community of people who are originally from Ávila. What everyone could agree on was that he died on the Huataracu River and that the tragedy occurred through no fault of his own. However, there was much less agreement on the ultimate, or even proximate causes, of his death. Several explanations were given for his death, all established culpability with one person or another.

The young man's father said that he was quite sober and was simply playing on a raft when he suddenly drowned. He was found at the bottom of a deep pool with what looked like a gaping gunshot wound in the chest. This wound, his father explained, had actually been caused by a **sagra tullu**, a sorcery dart. This man also took pains to defend his son's sobriety in order to deflect any possible blame from the young man.

Others, also supporting the idea that he had been killed by sorcery, explained that the older brother of the Huiruno boy that had accompanied him fishing had impregnated the daughter of a powerful shaman. This shaman then sent an anaconda to attack as a reprisal. This is the animal that killed the young Ávila man. Some people felt that this was on purpose, others felt that the attack had been directly aimed at the actual culprit and the Ávila man was an inadvertent victim.

Others explained that a dynamite (**tacu**) explosion caused the wound. Dynamite is sometimes used to kill fish, especially in the slower and deeper waters around Huiruno. This fishing method is extremely dangerous. A fuse can burn too quickly or dynamite that fails to promptly ignite can suddenly explode when it is handled. Many people in the region have been maimed and even killed from such mishaps. However, relatives did not offer this very plausible explana-

tion, implying, as it does in Ávila, direct legal culpability of the friends and relatives of the deceased.

As one neighbor astutely explained, relatives are apt to only "guardedly talk" (**arcasa cuindanun**) about the event. That is, they do not disclose the full details of the death in order to shield their family from blame. That is why the dead man's father did not even say that his son was fishing when he died; he was vaguely "playing" or "bathing" in the water. Indeed, those that favored the "death by dynamite" explanation were quick to assess blame to either the individual that purchased the dynamite or the one that actually took the unfortunate man fishing.

According to still another explanation, the person to blame was the deceased young man's brother-in-law. Because the young man had eloped, the marriage exchange had not been arranged in the proper fashion. It was not so important to the brother-in-law that the young man had not had an appropriate civil or church wedding or that he had not asked for his future wife's hand in the customary fashion. What mattered to him was that he failed to properly "purchase" his wife from her father, brothers, and uncles; that is, he still held a "debt" (**dibina**) with them. As an appropriate "selling price" for their sisters and daughters, most Ávila families will settle for a drinking party (**upina**) with abundant manioc beer, game meat, cigarettes, and especially liquor and sometimes other purchased items. This requires a fair amount of money by Ávila standards. Shotgun cartridges need to be distributed to relatives so that they can help provide game meat and liquor and the other goods must be purchased. The young man's brother-in-law, who is known to be quite violent, had been pressuring for this kind of party. This is why, according to some, the young man had gone to Huiruno. Huiruno is on the Tena-Loreto-Coca road and therefore it is a community that is much more immersed in a cash economy than Ávila. One can find work as a field hand on the nearby colonist ranches and one can even sometimes work for cash for one of the Runa families living in Huiruno. This final explanation indicates how webs of culpability can grow long but nevertheless fail to entangle ego.

I will now try to get at this problem of why sin is not a relevant concept in Ávila by look-

ing at animals that are classified as **tapia** (ominous). Under certain circumstances, encounters with these augur death. One such example is **camarana pishcu**, a kind of antshrike (probably the barred antshrike) that is known to eat insects flushed by army ants. If this bird flies around a house in circles it is a bad omen. This behavior mimics the way children would desperately circle around their house crying if one of their parents were to die.

Another example is the tarantula hawk, an enormous solitary wasp (*Pepsis* sp., Pompilidae) that is known as **runa pamba** (burier of people) in Ávila. Tarantula hawks sting tarantulas and other large spiders and drag their paralyzed bodies into burrows where they bury them after depositing an egg on their body so that the developing larva can feed on the paralyzed prey (Hogue 1993: 417). In Ávila, a **runa pamba** that is observed burying or digging a hole near the house is considered to be an omen that a relative will die. This wasp resembles a gravedigger throwing up piles of fresh red earth, from inside the pit. Like a gravedigger, this wasp breaks through the thin layer of topsoil and brings to the surface fresh piles of bright red clay. As Rosalina commented, "it throws up [piles of] dirt that are nice and red" ("**alpataca ahuaman shitan, pucaj shitan**"). Such piles of earth serve as a striking image of mourners burying their loved ones. The **runa pamba** is also thought of as a sorcerer's helper; its enormous stinger (**lanza**) is likened to a shamanic dart, and this too enforces its image as an omen.

Another example of an ominous animal is the large **huacaisiqui ariana** (literally, crybaby spider) also known as **tapia ariana** (omen spider, sub-order Mygalomorphae). This is an enormous spider that weaves a single thick strand that it lays down along the ground in order to trap large prey such as mice and birds (G. Onore, pers. comm.). One woman in Ávila described to me how she found one attacking a snake. If this spider is found in the act of laying down a long trail of thick thread as it moves through the forest understory –an activity described as **fiuran purin**– it is considered a bad omen. This is because it shows how weeping mourners will make a trail of tears as they travel across forest paths to tell their relatives of the death of a relative. As Ventura remarked, "it shows, 'you will wander around crying like this'" ("'**casna huacasa puringuichi**'

**ricuchin**").

There are many other example of ominous animals.[54] They all describe the very public signs of loss. They describe how people react to the death of loved ones. As such, these are more accurately omens of mourning and not of death. Indeed, they never augur the death of the individual that finds them.

From a subjective perspective, death is ineffable. Whether or not it is painful or traumatic, then, is moot. It is the experience of death by the living that is so hard to bear and these **tapia** omens speak to that experience. The dead become "**shuc tunu**" or "**shican**" (of another substance). The **aya** (spirits of the dead) lose their human identity although they are possessed by a longing to reunite with the living. The realization that one has been left alone in this world is one of the saddest and psychologically hardest experiences for the Runa. This is evidenced by the common laments of women during drinking parties that they are orphans (**huaccha**) because their parents are dead. People will refer to themselves using this term despite the fact that they still have living brothers and sisters, are married, and have children or even grandchildren. **Tapia** omens, then, index the existential realization of absolute loneliness as induced by dying (**aya** in its purest form). This pain, however, can only be experienced by the living in their mourning of the dead and their realization of the solitary nature of life alone as an orphan. Death for the Runa is thought of as unknowable because there is no subjective human perspective from which to experience it. Souls do not die, and –in so much as personhood is defined by having a soul– the person does not experience death. Death can only be experienced from the "outside." Mourners experience death. They become orphans. The corpse spirits (**aya**) seem to experience death in much the same way. They too are described as orphans (**huaccha**) who have been forcibly separated from the world of the living.

There seems to be a connection, then, between the inability to conceive of Hell, as noted by the missionaries, the inability to conceive of sin, and finally, the inconceivability of subjective death. Radical misfortune cannot be explained subjectively because there is no human perspec-

tive from which to experience it. If Hell is the place that people who commit moral transgressions go, then it is clear that the Runa, free of this penchant, would never see themselves as susceptible to this kind of punishment. The examples I have presented point to profound differences in the concept of Self between Runa and ecclesiastics.

The closest idea to a vision of Hell that the Runa have is a legendary space to which people from Archidona were said to have gone in the distant past as punishment for their sins. Even here, however, these "sinners" would only go temporarily and they would do so when alive. Furthermore, they seemed to enjoy themselves in this inferno. According to one narrative:

> In the beginning times (**callari uras**) the sinners from Archidona, especially those who committed adultery with their *compadres*, would all go to a big *fiesta* in Hell for three or four days during Easter. This took place inside El Reventador Volcano. There they turn into demons with tails and have sex "like dogs," in a position known as "**siquipuramanda"** in which the behinds unite and the heads and bodies face away from each other. Then they would fall into a burning lake at the bottom of the crater. The explosions that can occasionally be heard emanating from this volcano actual come from drums (**caja**) that are played by the sinning *compadres* in their wild party. After this, they then return home to Archidona.
>
> One jealous husband was waiting furiously, gun in hand, for his adulterous wife to return from such an excursion. She had gone to this party in the demonic mountain with her *compadre* lover and returned with lots of monkey and peccary meat. With these gifts and the help of the demon she was able to placate her husband ("**mansuyachin**"). The wife then asked her husband if he heard their fiestas (i.e., the eruptions). He responded that he did.

This legend was probably strongly influenced by the missionaries. It is well known that the missionaries where quite successful in reinterpreting the Sangay Volcano, central to Shuar cosmology, as an abode of the devil (Descola 1996a: 368). Nonetheless, in Ávila versions of a volcanic Hell, no matter how unpalatable some of its imagery, this demonic world is not thought of as a place of suffering, certainly not eternal suffering.

***Dystopias***

Although the Runa do not believe in a Hell –i.e., as a space where souls go in the afterlife to suffer eternally because of personal sins– they do imagine a variety of dystopias that are perspectival distortions of everyday life. These do not, however, seem to be connected to a system of morality. For example, when Raul's five-year-old niece suddenly died, he was forced to walk the trails of Ávila at night in search of a neighbor that could lend a hammer in order to make the coffin. He was afraid of making this journey because when children die their **aya** ages instantly. Encountering one of these old and haggard spirits would be terrifying. The dystopia of the wretched **aya** is in marked contrast to the afterlife of the souls that go to the game master world. These, by contrast, become forever young.

Regarding plants, there is also a kind of dystopic parallel set of taxa. Several kinds of plants are classified as **supai**. These constitute a kind of parallel alter world of deception in which the good things in life are distorted in a disturbing way. For example, in Ávila **supai chuchu**, the name for the fruits of a forest liana of the Apocynaceae family, means demon's breast. In Ávila, fruit and fiber bearing canopy-dwelling plants, such as the hemiepyphyitic aroids whose aerial roots are used as tying fiber, are referred to as "mothers" (**mamaguna**). Attached to their perches atop tree branches in the heights of the canopy, these mothers produce valuable resources (akin to children) that they send to the canopy floor where the Runa can easily access them. However, all that the mother plant of the **supai chuchu** produces are the sizeable fallen –often rotting– fruits that are occasionally found on the ground. Like many Apocynaceae, these fruits are produced in pairs. Their shape suggests the pendulous breasts of an old woman and, in addition, like all members of this family, they exude copious, free-flowing white, sticky, and toxic latex. These fruits, then, are a kind of demonically inverted symbol of motherhood.

Other plants that are classified as **supai** are less malevolent but are nevertheless "unproductive" in some ways. For example, the forest tree known as **pasu** (*Gustavia macarensis*, Lecythidaceae) gets its name because it produces delicious oily fruits that taste like a cross

between a chestnut and an avocado when roasted. These fruit around Easter (Quichua, **pasu** from the Spanish, *Pascua*) and people and animals alike eat them. This plant's "demonic" relative is known as **supai pasu** (*G. longifolia*, Lecythidaceae). At first glance, this congeneric looks very similar to the edible **pasu**, which, in the context of comparison, is referred to as the good, or **ali**, **pasu**. However, upon closer inspection, the Runa will note that there are some important distinguishing features. As Ventura, with whom I collected a specimen, observed, the leaves of the demonic equivalent are longer (hence the Latin specific epithet) and the fruit "has a broader base" ("**paipa siqui anchurucuca**").[55] People might be induced to eat its fruit, for it bears somewhat later, after the "good" fruits of its delectable cousin are no longer to be found. When they try it, however, they are disappointed to find the flesh to be fibrous and insipid. The only use people find for the "demonic" plant is as a remedy for pains of the "innards" (**shungu nanai**).

***The City in the Forest***

I now turn more specifically to the geography and architecture of the utopian spaces that constitute the world of the game masters. These abodes are found deep in the forest and their entry portals are often striking features of the natural landscape, especially the waterfalls (**paccha**) found at the headwaters of rivers and streams. These spaces, however, are also decidedly urban (see also Mercier 1979: 139; Wavrin 1927: 325; Muratorio 1987: 236). In Ávila, people say that the paramount **curaga** lives in a large city. The Runa refer to this as Quito and generally locate it inside the Sumaco Volcano. Lesser game masters live in cities and villages akin to the smaller towns and cities that make up the parish and provincial seats of the Oriente such as Ahuano, Loreto, and Tena. These correspond to other features of the landscape such as smaller mountains and hills. Underground roads connect these metropoli and the game masters travel back and forth by car, motorcycle, and even by airplane and bicycle.

Hilario was able to observe some of the evidence for these links between game master abodes as they are inscribed in the landscape. In his youth, he was part of a group of Ávila men

that were recruited to serve as guides and porters for members of the Ecuadorian military who were intent on building a heliport and relay antennas near the summit of Sumaco. This volcano, in whose foothills Ávila is nestled, forms a near-perfect sugar cone. Although it is readily visible from Ávila, it took the expedition ten days to get to the top. From this barren and conical summit devoid of vegetation, all the major rivers of the region originate. At the top, however, these headwaters are nothing more than empty streambeds carved into stone that fan out radially like spokes from an axle. Describing these, Hilario, matter of factly remarked that these canals are the "*carreteras*" (roads) of the **amuguna** (lords). His sister Luisa added that these are where the lords drive their cars.

The "Quito within the jungle" is a place that people, on occasion, are actually thought to visit. For example, the mother of one man with whom I worked in Ávila became lost in the forest. She was quite elderly, recently widowed, and now also easily confused; one of her sons said that he would give her gifts of game meat, which she would then promptly forget about and permit to rot.[56] One day, when she was alone at a son's house accompanied only by her young grandchildren, she simply wandered off into the forest. Her children organized the neighbors in a search party to comb the surrounding woods but they were unable to find her. It was not clear if she was dead or alive. The belief that she was dead was supported by the fact that a dog belonging to one of her sons began to wail like a mourning relative.[57] This son also heard a night monkey crying like a person near his house. Both of these are potentially omens that can augur that a relative will die.

A few days later, in seeming confirmation of these omens, some neighbors caught the whiff of a rotting corpse in a ravine near their house. We searched the area but to no avail. Noting that a large conglomeration of vultures would have certainly alerted people to the presence of her body if she had indeed died, one son concluded that she was not dead but had been taken "inside" to the world of the game masters. A full five weeks after she first wandered into the forest, a young woman out fishing with her little brother on the Churu Yacu stumbled across the lost

woman after first noting that the **huili** fish had been scared off by some frightening presence. She found the woman emaciated and pale and groaning and shaking as if she were about to die. Her scalp, back, and feet were infested with worms and one toe had completely rotted away, possibly from snakebite. After recuperating some, she recounted how a boy that resembled one of her teenage grandsons led her "half-way" ("**chaupicamalla**") to the underground city that she called "Quito." She later commented to her relatives that this city was beautiful and opulent like "the real Quito" ("**Quitu causana llacta**").

Like the vision of "*El Dorado*" that took Spaniards to the Amazon in search of a city of gold, the waterfalls that the Runa encounter in the forest are portals that lead to the game master metropolis –an opulent city that the Runa refer to as "Quito." Indeed, the Ecuadorian capital has become the Runa's own "*El Dorado*." In Ávila, Quito has become a potent image for the utopian spaces of the game masters. How did this come about?

In the early colonial period there was a concerted effort on the part of residents of the Quijos region, including the ancestors of the Ávila Runa, to convince Spaniards to build a "Quito" in the Amazon. In 1559, as part of peace negotiations with Spaniards, leaders from this region met in Atunquyxo with the governor of Quito Gil Ramírez Dávalos. They supplicated him to, "make another city like Quito" (Ramírez Dávalos 1989 [1559]: 50, see also 39). Their reasoning, it seems, was economic. They were, "so impressed by the gifts that the Governor gave them that they asked him to found in their territory a Christian settlement like Quito, where they would gladly serve, given that through it, commerce would improve tremendously" (Oberem 1980: 74-74).

Of course, this "other" Quito was never founded in the lowlands and, to the continuing chagrin of local inhabitants, the region remained an economic backwater –isolated, for the most part, from broader networks of trade. To this day, the descendents of the Quijos lords that met with Ramírez Dávalos lament about this "failed Quito" in the Amazon. In Oyacachi, for example, a cloud forest village, that once formed part of one of the Quijos chiefdoms (Oberem 1980:

226), people recount that if their ancestors had not permitted a miraculous image of the Virgin Mary to abandoned them (it was moved to El Quinche in the highlands by the bishopric of Quito in 1604), Oyacachi would have become an important city like Quito and there would have been no mountains separating Oyacachi from the prosperous populations of the highlands (Kohn, in press). As one man in Oyacachi explained to me, "If a Quito would have been built in Oyacachi [our village] would have become a real city" ("**Oyacachipi Quituta ruashpa** […] **propio llacta canman carca**").

Wavrin (1927: 330) documented from a Napo Runa, a myth that touches on very similar themes. According to this myth, the ancestors of the Runa were savage and they could talk to the birds and animals. The Pope from Rome sent the Inca king so that he could teach them Quichua. This king tried to build a city near Satas mountain on the Upper Napo but was unable to:

> Unable to establish his capital in the place he had chosen, the Inca king founded another one at the highest point (Quito) (*en todo el zenit (Quito*)). He created this by swinging a bull around by the tail and throwing him to the ground. And from his pieces, from each part the building materials were formed […] If the city of Satas had been built, the ocean would have been in that direction (to the west) instead of where it is now (to the east). Since Quito was created the ocean has been on this side (Wavrin 1927: 330).

People in Ávila today recount a similar version of this myth:

> A king (**rey**) passed through the Ávila region coming, possibly, from down river (**uraipartimanda**). He crossed the Suno river and continued up river to a place called Balsiti near the Sumaco Volcano. There he "began to establish a city" (**llac-tan- callarisca**) by first throwing stones in every direction using a sling (**huara-ca**)[58]. The Sumaco lord became angered and stopped him from making the city, so the king left for the highlands. On his way, however, he made Huamani Mountain (the high Andean peak by which Amazonian travelers to Quito must pass before arriving to the temperate inter-Andean valleys) and also made it very rainy there. Then he went to Quito and built his city there because the **curaga** of the Pichincha Volcano wanted it so. Again, he threw the stones with the sling in all directions and there was enough space for a large city.

For some, the remnants of this failed Quito in the jungle can still be discerned in the landscape. As a teenager, Ventura was employed as a woodsman on the interoceanic highway that was to connect the oil rich region of Coca to Baeza, from which there was a road on to Quito. His crew began in Coca and they were to cut a transect to the west until the half way mark where they would meet with a crew that was to have cut the transect originating in Baeza. They never met with the Baeza crew and, running out of supplies, Ventura's crew was forced to turn back; indeed, this road was never built. The half way mark was approximately at a spot known as Quirihua near the Paya Yacu, located on a plain to the north of the Suno River headwaters. Here Ventura was surprised to find "cement" steps, as well as a stone road. These, he felt, were all that remained of the city that the king failed to build. Ventura concluded that if Quito would have been built there, Ávila, because of its proximity, would have also become a "big city" ("**jatun llacta**") and by now its inhabitants would have become "de-Indianized" mestizos like the highlanders (**jahuallacta**).[59]

All of these examples illustrate how people of the "Quijos" region, today and in the past, explain their economic and geographical isolation from a wealthy metropolis in terms of a failure to establish that metropolis in their region. It is, in all these cases, due to local decisions and acts—the failure to properly take care of the Virgin in Oyacachi or the rejection of the king and his city by the Sumaco **curaga**—that Quito does not exist in the lowlands. I believe, as I will explore subsequently, that this "personalization" of Quito explains in part why it is also seen as accessible and why, in some ways, it is also seen as a potentially tangible presence in the forest.

Quito seems to have been imagined by the Runa as a kind of worldly paradise of opulence and freedom to which whites, such as priests, had privileged access. Gianotti, a Josephine missionary, wrote in 1924 of finding a Runa peon on one of the oppressive rubber estates of the Napo River. This man wanted to escape with the priests, thinking that he would thus be able to live in a "paradise" in Quito:

> Arriving on a dark and rainy night to Belleza […] we found a poor Indian (*indiecito*) soaking and shivering with cold and hunger. "Who are you? Where do you come from? Where are you going?" were our questions. With great effort he

> managed to answer that he would go with us to Quito. "But, do you know were Quito is? We live in Tena and not in Quito. Where did you escape from?" "From [the *hacienda*] Libertad [he answered]." "Your master doesn't love you?" "No [he replied]." "And why do you want to come with us?" "Because the *padres* love me." Then I remembered that in Florencia, after having gotten some forty kids to sing and pray, I taught them to dance the *tarantella*. Poor fellow, he thought that with us he would go to sing, pray, and dance forever (Gianotti 1997: 60-61).

In response to the priest's question—"do you know where Quito is?"—I think the Runa peon would respond with an emphatic, "yes." Quito is a space of tremendous wealth and power located in regions that are difficult to access by the uninitiated—places like the cities in the deepest reaches of the forest, or those in the high Andes, for example. This man had his wish fulfilled; he went to live with priests. Unfortunately, however, instead of travelling to Quito, he ended up as a servant of the Josephines in one of their lowland missions: "now he is one of our charges (*criadito*), and very useful" (Gianotti 1997: 61).

The Jesuits were well aware of the tremendous power that cities like Quito could exert on the consciousness of Amazonians and they encouraged them to travel to them:

> If it is possible, they should come out occasionally to one of the cities that are the closest to the inland region (*montaña*), for by just seeing the kind of political governance that is the norm among the Christians, how they worship and the ornateness of the churches, the respect and veneration that the people have for the priests and prelates, they learn much more than in the repeated sermons and counsel of the missionary, and when they return to their land, they endeavor to imitate to the best of their abilities what they saw practiced elsewhere (Maroni 1988 [1738]: 206).

From the mid-19$^{th}$ century until well into the 20$^{th}$, Ávila, along with Loreto and Concepción, were known as communities whose inhabitants made occasional treks to Quito to trade products such as **pita** fiber and to meet with government officials (Villavicencio 1858: 389). Marcos Jipa, Hilario and Luisa's father, was one such man. Born at the turn of the 20$^{th}$ century, as an adult he was appointed "*capitán*" by the government and would make regular trips to Quito to settle dis-

putes and sell **pita** fiber. Hilario and Luisa accompanied him once, making the eight-day trip barefoot to marvel at the wonders of this city.[60]

***Other Utopias***

Quito is not the only geographical/architectural model for the world of the game masters. Given that the game masters are often depicted as priests, one might think that the Jesuit mission may well be another source. These "sacred experiments" constituted attempts to establish villages of Catholic Indians that reproduced what were considered the virtuous elements of European civil society while excluding those elements that were seen as unfavorable: "The Reductions defiantly proclaimed the need to construct a society parallel to that of settlers, free of interference either from them or from a civil administration sensitive to their interests" (Barnadas 1984: 533). The leaders of these ideal communities, of course, would be the priests. There was never, however, such a Reduction in Ávila. When the Jesuits began to establish their network of missions in the Amazon in the 17th century, Ávila was still an *encomienda* and, religiously, it was under secular clerical control.[61] Furthermore, at this time, the Jesuits were primarily concerned with the "heathen" Indians and, the Ávila region, by now had had more than half a century of sustained contact with Europeans. In addition, unlike Archidona –which would go back and forth between Jesuit and secular control– Ávila was not on the route taken by the Jesuits to their Mainas missions.[62] Ávila seems to have been directly influenced by the Jesuits only during the brief second era of Jesuit missionization in the Amazon from 1861 to 1896.[63] During this time there was a Jesuit school and mission in nearby Loreto. Here too there was an attempt to create an ideal society of Indians. For example, before the nuns known as the *Madres religiosas del Buen Pastor* hastily left the Oriente in 1895, shortly before the expulsion of the Jesuits, they arranged for six couples of Indian boys and girls that had been raised in the missionary school in Loreto to be married: "one could expect that they would form the nucleus of the new Christian population to be established. These six couples inhabited the house that the nuns left vacant when they left for

Quito" (Jouanen 1977: 213).

Given the abundant references that the Runa make to fallows and pens, and farm animals and *patrones*, in reference to the game master world, another important influence on the architecture of this realm is the Amazonian *hacienda*. As Muratorio has shown, the *hacienda* of the Upper Napo, especially in its heyday, between 1915 and 1950[64] when the *patrones* were the undisputed political authorities in the region, is a unique institution, adapted to specific local culture and economic features of the Upper Amazon (Muratorio 1987: 186). The Amazonian *hacienda* was much more like the colonial *encomienda* (Taylor 1999: 215) in that the status and wealth of the *patrón* depended more on the coercive control of people than it did on the control of land as property. The control of native labor was achieved through debt obligations.

Ecological, economic, and sociological factors dictated that these estates be extractive. Their wealth was not a product of converting the Amazonian jungle into vast expanse of arable land. Such a feat would require extensive amounts of labor and, more importantly, the region's isolation made it impossible for perishable products to be transported to the markets of the highlands. Rather, these estates focused primarily on creating debt obligations with natives through the forced distribution of commercial goods such as clothing, beads, and steel tools, at inflated prices in exchange for extractive products. These products included rubber, gold, and **pita** fiber, among other things. For the most part, the agropastoral aspect of the estate itself for which native labor was also used, although symbolically important, was primarily for the subsistence of the *hacienda* (Muratorio 1987: 186).

The *haciendas* of the Upper Amazon were like nodes in a vast network. These were sources of wealth and power from which manufactured goods originated and spread out throughout the region through the networks of Indian debtors that were drawn in. The *haciendas* produced their wealth based on this nodal status. Rubber from far-flung and dispersed trees were collected at these points as was gold powder and flakes panned in the tentacle-like network of myriad streams and creeks. **Pita** fiber was produced in the distant secondary residences (known

as **tambu** or **purina chagra**), to which Runa families often retreated (Villavicencio 1858) and it too was brought to these collection points.

Some of these unique properties of this economic institution are reflected today in descriptions of the game master world. The game masters live in a localized space, in a city inside a waterfall, say. Furthermore, their wealth is concentrated in enclosed areas; their animals are kept on their estates in pens. Yet, like the *hacendados*, their presence can be felt throughout the forest. Furthermore, their relationship to the forest is not one of extensive transformation through labor but of usufruct. In this sense it is fitting that the Runa refer to the forest, not as the pastures of the game master –for these would require extensive upkeep– but as fallows. Like the fallows of the Runa, the forest for the game master and *hacendado* is a source of wealth that requires labor only in collection and extraction and not in maintenance. In the same way that manufactured goods are stockpiled by *patrones* in the *hacienda* and trickle out throughout the landscape to reach Runa hands, the animals of the game masters are overly abundant in the pens and are occasional spotted and hunted in the forest only after they have been let out of the pens by their masters.

Although the Ávila Runa have been economically self-sufficient in many respects, their attraction to the estates of rubber merchants and other *patrones* stemmed in large part from their need for certain manufactured goods. In Ávila, some people refer to the times, until approximately the early 1970s, as **nativu uras**. What distinguished that time period from the present was that minimal amounts of purchased goods were utilized by the Runa. A few men had crude muzzle-loading shot guns. The rest used blowguns. Cloth and some clothing was purchased but these were colored using local plant dyes.[65] Cooking ware and storage vessels were made locally from clay. Many of the goods that are purchased today such as rubber boots, nylon fiber and rope, cookware and tableware, firearms and ammunition, flashlights and batteries were not part of everyday life in **nativu uras**. Nevertheless, items such as clothing, steel tools, blowgun poison, salt and glass trade beads, were central to Runa life ways and these, for the most part, were acquired via relationships with the *patrones*.

The dependency that the Runa had on the *hacienda* for manufactured goods mirrors their dependency on the forest for meat. In terms of food, Runa households are for the most part self-sufficient. Gardens produce plantains and manioc year round and orchards produce a variety of other products on a more seasonal basis. Yet the Runa must also complement these by venturing into the forest to acquire other resources, especially meat.

These estates never occupied vast areas of land and they rarely displaced the Runa permanently. Unlike the peons of the highland *hacienda*, the Runa, for the most part, retained access to their own land-based resources. They were rarely forced to live on the *hacienda* and therefore did not become dependent on it for access to land, as the highland system required (1987: 187).

In this sense, also, the *patrón* was like the historical lords of the early colonial period and, by extension, like the game master lords that populate the forest today. The relationship with a particular *patrón* was dependent on residential kin group (**muntun)** affiliation. About fifty families were usually under the sphere of influence of a single *patrón* (Muratorio 1987: 186). This is similar in many ways to the relationship of commoner to **curaga** as recorded in early colonial times. A local **curaga** had one hundred or two hundred people under him (Oberem 1980: 224). In terms of a demographic ratio, this number corresponds to the sphere of influence exerted by a *patrón* over the Runa at the height of the estate system.

Game masters that do not "know" the Runa that are passing through their domains can be extremely aggressive. They can cause dangerous wind and lightning storms, for example. Similarly, *patrones* could pursue the Runa aggressively and mercilessly unless the Runa manage to ally themselves with another master:

> If the Indian escapes from his master because he is unhappy or mistreated *(por descontento o torturas*), the authorities usually give armed support in order to hunt the fugitive and return him to his master, or they permit [the master] to organize an expedition to find the fugitive, if the [Indian] has not found protection from some powerful person who has offered to settle the matter or buy his freedom (Gianotti 1997: 132).

In the 1920s, especially in the region of Tena, Archidona, and Puerto Napo, practically all the Runa were affiliated with a *patrón*:

> Almost all the Indians that live near the settlements of the whites are dependent on a person known as a *patrón*. This figure has dominion over a number of families, to whom he extends goods on credit, and they then pay for these with their labor. The result is that in Archidona, Tena, and Puerto Napo, securing porters or a crew for the canoes is almost impossible without going through a *patrón*. This person charges the travelers and uses this money to discount the debts that the Indians have incurred (Oberem 1980: 117).

In this sense too, these *patrones* are like powerful lords. All the local population are aligned with one or another and they are able to allocate these people as they see fit.

The estates with which the Ávila Runa had most contact were primarily those on the Napo River. For example, the wealthy *hacienda* La Armenia was known to employ many people from Ávila as well as from Loreto and San José in the first decades of the 20$^{th}$ century (Gianotti 1997: 44, footnote 33).

The Runa of the Archidona region, owing to their proximity to administrative seats and their distance from the more easily navigable portions of the Napo river, were, for the most part, able to avoid enslavement in the Rubber Boom era. The Runa of Ávila, however, were not so fortunate. They, along with the Runa of Loreto and Concepción, were an important source that rubber bosses turned to in their search for laborers (Muratorio 1987: 107). Oberem, who visited Loreto in the 1950s, recounts how, in the generation of the parents of his informants, more than a thousand people were sold to rubber bosses in Peru as well as Brazil and Bolivia. These, for the most part, were taken by force. Of these, it was said, only forty returned (Oberem 1980: 117).

The Ávila Runa associate the Napo estate *patrones* with this trade. For example, it is said that a "white highlander" (**blancu**, **ahuallacta**) by the name of "Ron," with an estate in the Coca region, came to enslave the Runa. He would tie them up, saying that the government had sent him.[66] One captured man was able to cover himself with a magical powder (**pusanga**). This pro-

duced a wet slimy substance (**llausa**) that permitted him to slip out of his fetters and then untie a group of people. This group escaped and went to hide in the foothills of Sumaco near Asna Yacu Uma. They only cooked with fires at night and made no trails, lest they be discovered. They would come down to Ávila at night in order to harvest plantains and other crops from their gardens. An Ávila Runa named Marcos[67] went to Quito to complain to the authorities that people were being taken away and that the population was diminishing rapidly. The authorities explained that they had in no way been involved and they sent a document stating that this practice was prohibited. Those enslaved were taken to work rubber in Auca (Huaorani) territory and in regions that are now part of the Peruvian Amazon. Many never came back and their descendents still live in those regions, bearing Ávila last names.

The man named "Ron" in this, and several other accounts I heard in Ávila, seems to be the well known rubber boss Abraham Ron, described by Gianotti in 1924 as, "a kind of medieval character, a castle-owner (*castellano*), or feudal lord" (Gianotti 1997: 62). He owned an estate on the Napo known as La Providencia (Gianotti 1997:47).

Clearly the Ávila Runa are conscious of the tremendous abuses committed against the Runa by *patrones* during the Rubber Boom. Yet, in the game master realm, the Runa have come to idealize the rubber era *haciendas* as microcosms of self-sufficient wealth and power. How did this come about?

Such an idealization in Ávila may be due in part to the fact that most of those that suffered most under the rubber bosses never returned. They either perished or settled permanently in the region of their relocation (primarily down river in Peru). As Oberem and the Ávila account I report make clear, most people that were taken away did not come back.

Another factor accounting for this idealization seems to be that the *patrones* consciously cultivated the idea that these estates were utopian. Estates were named after affluent or distant and exotic sounding countries such as "*Bélgica*" or "*Armenia*" or they were named using utopian terms connected to notions of progress or religious themes (e.g*., Oasis, Libertad, Providencia*)

(Gianotti 1997). For example, the Hacienda Arcadia, on the Napo, somewhat upriver from the Aguarico confluence, was reputed as the most productive *hacienda* of the region and was clearly depicted in utopian, self sufficient terms:

> It has one hundred and eighty Indian families and five white ones, in addition to the large family [of the owner]. Arcadia is an important center for work and progress (*de trabajo y progreso*), where the Indians are like our workers [i.e., in Italy], well dressed, educated, and fluent in the Spanish language. The Indians are paid here in excess, given that they have everything: clothing, sewing machines, soap, pots, salt, meat, shoes, hats, caps, etc. (Gianotti 1997: 53).

These utopian images seem to have been aimed primarily at the society of colonists, and their establishment was a step towards fulfilling their own ideals of wealth, home, and stability. Some *hacendados* also tried overtly to incorporate the Runa into their vision of utopia. For example, the *teniente político* of Coca had an *hacienda* known as Coronel Montúfar on the Napo. He told Gianotti of his plans to

> build and settle, on the other side of the river, a town of free Indian servants (*indios libres-servidores*) with a church, plaza, and bell tower; he already gathered the Indians from the *hacienda* that belonged to Pérez who were left without a *patrón* after the death of the aforementioned Mr. Pérez, and now he wants to resettle there the Indians from Loreto, Ávila, and San José de Payamino (1997: 43-44).

***Power in the Landscape***

Just as politically, the priest and estate owner are combined with that of the autonomous indigenous **curaga**, so too geographically. The image of a jungle utopia combines images of Quito, the Catholic mission, and the *hacienda* with traditional models that posit the existence of powerful masters, residing in prominent mountains, who control regions and their animals.

In Ávila, the most prominent of these mountains are the Sumaco Volcano and Terere. This can be seen in the commonly recounted myth about how the Terere lord stole the animals from

the Sumaco lord and how this explains why the "down river" region is thought to be so much richer in fish and game than the Ávila region. I have already discussed the Sumaco **curaga** in the context of early colonial chiefdoms. Here I am more interested in understanding how the distinction between down river and upland biotopes serves as a way to naturalize certain political and economic structures that have been projected onto the forest through the game masters.

As early as the 17th century Terere was considered a powerful landscape feature at a macroregional level. It was thought of as powerful by the people upriver from it and it was also associated with abundant natural resources. In his description of the Napo river, Maroni gives a sense of how this lower portion of the Napo was seen as a region of abundant resources in contrast to the upland region. For example, he writes that a little more than ten leagues down river from the mouth of the Coca River there are two lagoons with abundant aquatic resources: "these are the stocks (*dispensa*) from which those that descend or ascend the Napo are accustomed to provision themselves of fish for the journey" (Maroni 1988 [1738]: 117). A day and a half's journey further downriver one encounters the famed "*Tiriri*" (Terere) mountain:

> In the middle of the river there is an island that has a kind of peak that is covered with small trees. It is called Tiriri, and is best known on account of a superstition that the Indians have as they pass by it, which is that if they raise their voices or make any noise near it, the mountain will respond with roars and will cause a storm; this is why they will pass by very quietly. Also, when the people that live near Archidona and Napo hear thundering from the direction of the Marañon, they will say that Tiriri is announcing the arrival of people from downriver (Maroni 1988 [1738]: 118).

Uriarte, a Jesuit missionary in the Mainas mission in the mid-18th century also writes about this mountain:

> Those from Santa Rosa say that it roars and those from other parts are convinced that the **zupai** or devil will tip canoes from the peak, and just a few years ago the canoe of the official dispatch (*del ordinario, ó despacho*), which is usually guided

> by a White, did not want to risk passing near the mountain, but instead passed at a great distance, and only with great silence, as they passed the Indians were saying: go quietly, lest the devil of this mountain hear us (Uriarte in Chantre y Herrera 1901:444-445).

Uriarte was quite eager to rid the Indians, and even Spaniards, of their beliefs in the powers of this place (Uriarte in Chantre y Herrera 1901:415).[68] He attempted to do so by climbing to the top of the mountain, cutting down a tree and erecting a cross. He then stopped with the Indian crew of his canoe to eat on the island. He gleefully reports that before getting back on the canoe a boy stayed behind to defecate and then said, "I no longer fear you devil; here I leave you that message" ("*No te temo ya, diablo; ahí te dejo ese recado*") (Uriarte in Chantre y Herrera 1901: 445). What is important here is how even the missionaries recognize the existence of the beings that are associated with this mountain. Neither Uriarte nor the boy ever negate the idea that the "**zupai**" exists as a sentient volitional entity. What they try to show is that this spirit now has a new master in the form of the priest and all that he represents.

Despite the Jesuits intentions to defeat it, Terere continues to be important as a powerful place to the Runa in Ávila. Not only is it still mentioned prominently in myth but its relation to Ávila is even inscribed in the landscape; a gully (**larca**) on a hill in the headwaters of the Ishpano River is said to have been made by stampeding herds of white-lipped peccaries as they were called by the Terere **curaga** to come down river. This kind of peccary is today locally extinct in Ávila but still extant in the forests at lower elevations around Terere.

The Ávila Sumaco/Terere myth explaining the differential abundance of game between upland and down river regions points to certain ecological contrasts recognized by outsiders (e.g., Villavicencio 1984 [1858]: 349) as well as by locals.[69] As Dolby (1894: 483) notes: "The Lower Napo abounds in fish and aquatic mammals, whereas the upper stream contains a very limited number of species. Below Coca, nearly every kind of fish found in other Amazon streams is to be met with." Terere marks the geographical location, more or less, where the Napo becomes

plentiful. Gianotti, writing in the 1920s, indicates that the Runa recognized this distinction as well. As he planned a trip to this region via the Napo from Tena he noted that many Runa wanted to accompany him, perhaps because they were attracted to the idea of a, "a great feast of meat and fish, given that there is abundant hunting and fishing on the Lower Napo" (Gianotti 1997: 108).

Whitehead (1993) has convincingly argued that the highland/lowland distinction is in large part a byproduct of European colonialism that reflects differential access to European trade goods rather than ecological differences in resource abundance. Applied to Amazonia in general, this argument holds. Yet, in Ávila the situation is somewhat different. The proximity of Ávila (and the Upper Napo more generally) to Quito, made this city, and not the easily navigable Amazon and lower Napo, the main source of European goods. Furthermore, there are demonstrable differences in fish yield and diversity, for example, between the swift white water streams and rivers in the Ávila region and the slow moving meandering rivers to the east that seem to have been important to Amazonians for some time.

The fact that the upland/downriver distinction is grounded in demonstrable ecological differences makes the contrast an apt vehicle for naturalizing colonial and republican distributions of power. It is not, in this case, that supposed ecological differences are really historical constructions. Rather, such differences are grafted on such historical forces and made to speak for them. For example in Ávila today, some people say that Guayaquil, the Ecuadorian coastal city and current center of national economic power, is inside the Terere mountain. Whereas Quito, the nation's capital and traditional seat of colonial power, is located in Sumaco. The competition between these two cities –coastal Guayaquil with its mercantile wealth and highland Quito with its secular and religious authority—has defined Ecuadorian politics throughout the republican period and even earlier. Like Guayaquil, Terere is thought of as the young upstart, stealing the resources from the older and more powerful Sumaco.[70]

The upland/lowland distinction as illustrated by the Sumaco/Terere myth is further height-

ened by the fact that Ávila has often lost much of its human population to these lower parts. Ávila residents were enslaved during the Rubber Boom and taken down the Napo (often well past Terere) to tap rubber. More recently, many Ávila Runa have migrated down the Chaca Yacu and Huataracu rivers in search of more abundant fish yields. These demographic movements, then, also become inscribed on the landscape.

The Jesuits were not able to eradicate from the minds of Amazonians the power of Terere. Indeed it is still imagined as a potent space. It is precisely because of its potency, and the ways in which this power is based on tangible ecological distinctions, that such spaces have continued to serve as a vehicle through which to think of how power is distributed.

Like the relation between Sumaco and Terere, competitions between other mountains also serve to naturalize the current political situation in which the Runa find themselves. In Ávila, a myth is told in which, during the flood, three mountains, Chuhuita, Yahuar Urcu, and Sumaco began to compete against each other in order to see which one of these could outgrow the rising waters. According to one version, people who took refuge on Yahuar Urcu were able to survive the flood thanks to the protection of this mountain. According to a version published by Orr and Hudelson (1971: 84-87), during the flood Chiuta (i.e., Chuhuita) and Sumaco began to compete. Each mountain—first Sumaco and then Chiuta—called people to convince them that they should save themselves by climbing them. Although Sumaco is by far the larger of the two, Chiuta grew and was able to maintain itself above the flood line. Those on top of it survived. Sumaco, on the other hand, was covered with water and the people that climbed it perished. Today, Chiuta, which is visible at the headwaters of the Tena river, has shrunken again to its original small size.

The rivalry between these two mountains is quite similar to that between *patrones* competing for *peones*. As Sinclair and Wasson observed regarding the latter: “Each white man exercises a sphere of influence over as many Indians as he can, and the rivalry between white men is rather keen” (Sinclair and Wasson 1923: 209). Power in the Upper Amazon emanates from the control of social relations. Just as the Runa are empowered by the relationships they can estab-

lish with the game masters, so too the power of mountain lords and *patrones* alike is dependent on the relationships they can establish with the Runa.

**Conclusion**

In this chapter I have traced elements of Runa ecological cosmology especially as these pertain to the world of the game masters. Although this cosmology is very traditional in logic it is outward looking in content. Traditional game master cosmologies socialize nature by projecting local ideas of the social order to the realm of nature. The Runa view of society, by contrast, includes the greater nation-state in which Ávila is inserted; this greater society is what is projected on the forest realm. As such, a study of local ecological cosmology is also a way of studying history.

An exploration of the game master realm indicates how environment and history become aligned. It is not that an environment is historically constructed, but that certain meaningful historical relations have become mapped onto features of the environment. This is true, for example, of the way in which some people in Ávila understand a traditional myth about the conflicts between a young upstart game master and his elder counterpart as equivalent to the competition between Guayaquil and Quito. This statement about the difference between a Guayaquil game master realm and a Quito resonates with other distinctions –natural and social– that already inhere in the landscape.

This idea of resonance is important. Both estate owners and the Runa have had to make a living from the same environment in much the same way; amassing gold and rubber is similar to hunting and fishing in that these are all extractive activities. As such, they all require similar relations to the environment. It is not enough, then, to say that the game masters are reflections of a larger political and economic order, for such orders have had to respond to the same environment that hunters encounter. And these orders are quite constrained by environmental factors; that the game masters see forests as fallows, and not as pastures, says something about the nature

of an extractive economy that must engage with a landscape on terms that are not only social.

By looking at Runa understandings of who controls the animals of the forest, we can also get a sense of their understandings of how powerful people, such as priests and estate owners, control resources. In addition, we can get a sense of how the Runa have reacted to that power. Why, for example, is an afterlife that includes tribute payment and servitude embraced as a paradise? I have only been able to raise that question in this chapter. To answer it requires an understanding of Runa notions regarding where power resides and how to access it. These two points will be addressed in Chapters Seven and Nine respectively.

# Chapter Seven
# Wearing Whiteness:
# An Amazonian Strategy for Harnessing Power

## Introduction

A tuft of fur snagged on a spine was the final clue that led us to the body of the peccary Oswaldo had shot several hours before. We were on Basaqui Urcu, a steep foothill of the Sumaco Volcano northwest of Ávila. As we caught our breath, Oswaldo began to tell me what he had dreamt the night before. "I had gone to Loreto to visit my *compadre*," he said, "when suddenly an angry policeman appeared. His shirt was covered with clippings from a recent hair cut." Frightened, Oswaldo awoke and commented to his wife, "I've dreamt badly." Fortunately, he was wrong. As the events of the day would indeed prove, Oswaldo had dreamt quite well. The hair on the policeman's shirt, in fact, augured killing the peccary; after hauling a peccary carcass, bristles will cling to a hunter's shirt like hair clippings. But Oswaldo's interpretive confusion points to a profound ambivalence that permeates Runa life; hunters simultaneously see themselves as potent predators –akin to powerful "whites" such as the policeman– yet they can also become the helpless prey of these same rapacious figures.

How whiteness can, at times, be equated with Runa selfhood, and at other times with those that dominate and threaten the Runa, is the subject of the present chapter. Whites are not only the "Other's Other" but they have become the "Other's Self" as well (see Turner 1988). Whites have come to index a condition of power and, as such, the Runa incorporate their attributes into their own notions of selfhood.

## Clothing

The Runa use the terms "**yura**" or "**blancu**" (literally, whites, the latter from the Spanish, *blanco*) to refer to people of European descent or with light features or, additionally, those who,

like the policeman, have the accoutrements of power usually associated with whites. Yet, the concept of whiteness that these terms refer to is quite different from the western folk notion of genotypic race. In this section I examine where whiteness resides, what it means for Amazonians, and how its power can be harnessed. Whiteness is an attribute of certain kinds of bodies. That this attribute can be harnessed in Ávila, is due to the ways in which bodies and some of their markers—skins and clothing, odors and adornments, tools and accoutrements—relate to those persons these embellish and how they are seen to empower them.

***Bodies and Souls***

Ideas about clothing are central to the way the people in Ávila see the interaction between the body and the soul (Viveiros de Castro 1998: 482). This can be seen by examining their ideas concerning what happens to the body after death. For example, when Ventura's mother Rosa died she was thought to have gone "inside" (**ucuman**) to the world of the game masters where she became the wife of a lord (**curagapa huarmi**). All that was left of her in the "above" world (**jahuapi**) was her skin (**cara**); "only her skin was abandoned" ("**cara caralla ichurin**") when she went to the game master world. This "skin" was what was left for her children to bury at her funeral. Ventura remarked that although his mother had died quite old, she now lives eternally young. Her body will once again become the way it was when she was the same age as her pubescent granddaughters Meri and Soraida. Girls of this age—between twelve and fourteen, more or less—are considered nubile and are described as "with breasts" (**chuchuyu**). Ventura explained that "inside" his mother, "would live forever, she would never again die and would therefore live free of suffering just like a child" ("**huiñai huiñai causangapa, mana mas huañungapa, mana tormento, huahuacuintallata**").

For the Runa, bodily states, such as youth or old age, are seen as encasements, or clothing, and, as such, they are separable from the person. This is evident in the way that Rosa was understood to have discarded her old body like a snake shedding its skin. This ability to separate

the skin from the essence is very important because these "skins" also have the ability to potentiate essences. Indeed, this can only be realized if they are separable; Rosa's eternal youthful status is defined by the youthful kind of body she now inhabits and the old body (or skin) that she discarded when she left the above world.

The idea that inner essence and outer appearances are separable is also evident in local entomological classification. Beetles are referred to in general as **curu mama** (mother of the larva). This seems to be due to the economic importance of the coveted **chunda curu**, the edible grubs of the palm weevil (**chunda curu mama**, *Rhynochophorus palmarum*, Curculionidae).[71] Because this insect is only eaten in its larval form, weevils, and by extension all beetles, are named in terms of this developmental stage. They are all "mothers of larvae." Such adult beetles are understood to be "**huasiyasca**" ("with a house made around [them]"). That is, the exoskeleton is seen as forming a protective house around the larva still "inside." The implication is that the armor-like horny shells of these insects are a kind of protective encasement that houses the "real" being which is the larval stage.

The relationship of bodies to persons can also be seen in Amazonian beliefs about the passage of souls to different bodies. The early Jesuits, it seems, were not quite capable of capturing the Amazonian logic of this process. Figueroa, for example, states: "the souls infuse themselves (*se infunden*) in other bodies –of men, birds, tigers, and other animals" (Figueroa 1986 [1661]: 282). Similarly, Magnin comments: "even if they die, their souls will return to shape (*a informar*) new bodies, this is particularly true of Sorcerers" (Magnin 1988 [1740]: 475). For Figueroa, souls fill bodies in the same way that liquid fills a vessel; for Magnin souls give bodies their form. But the Amazonian notion, by contrast, seems to be just the reverse; the body is the vessel that informs the soul.

For example, in Ávila today, people cultivate a jaguar spirit. Once they do so, they are said to be **pumayu** (with the jaguar) and because of this they are thought to be powerful. Yet their soul only goes to inhabit the body of a jaguar upon death. Nevertheless, it is this potential inhab-

itation—the fact that the soul will some day be cloaked in a jaguar's body—that empowers people when they are still alive (see Chapter Five).

Because the jaguar, as top predator and "dog" of the game masters, has come to symbolize in so many ways Runa existential predicaments and aspirations (see Chapter Five), this being is an extremely important vehicles through which the relationship between person and body is understood.

Hides index the power of jaguars. According to the Runa, jaguars see such hides as their clothing. This became evident to me listening to Ameriga's comments to Hilario regarding how they could have kept a jaguar from killing their three dogs. A jaguar killed these dogs after these followed Hilario and part of his family into some fallow and transitional forest.

The family was quite distressed by this and much of the conversation in the days that followed the attack kept returning to trying to make sense of these events and also imagining how they could have been averted. Ameriga commented that if Hilario had just walked in a certain part of the fallow the jaguar would have heard him and would have been scared away. She commented:

> **shamusarucu manchaipa canga**
> [hearing someone] big like that coming must be frightening

Ameriga paused and then in a laughing tone she said

> **atun machechehuan** [sic]
> with a big machete

> **tlin tilin**
> [**tlin** or **tilin**, a sound symbolic adverb describing the action of effortlessly slicing branches while clearing a trail, this image is based on the ringing sound that a machete makes as it makes clean slices through vegetation]

> […]

**runata manchan**
[it would have been] scared of a man

My initial interpretation of these comments was that the jaguar was simply scared of people. Ventura, who was helping me get a better understanding of the transcription, however, had a more nuanced analysis. He said that what caused Ameriga to take such evident satisfaction in this fantasy of scaring away the jaguar that had killed her beloved dogs is her imagination of how the jaguar would have experienced her husband moving through the vegetation. Hearing a razor sharp machete strike effortlessly through branches with a, "**tlin tilin**" terrifies the jaguar because it reminds him of how easily people can slice through his "clothing." What people see as the jaguar's hide, Ventura explained, the jaguar perceives as his clothing. The specific kind of clothing that jaguars see themselves wearing, it is said, is the **cushma**, a kind of tunic worn traditionally by Cofán as well as western Tukanoan Siona and Secoya men.

In many ways, it is in the jaguar's clothing that its power resides. By extension, by wearing jaguar hides, people can acquire some of this animal's power. For example, Wavrin recounts a myth told by a Runa from the Napo river in which some shamans escaped Spanish domination by becoming jaguars and retreating to the forest. When these shaman-jaguars began to turn on their own Runa brethren, a party of men was sent to trap them. By hiding, these men were able to see how the shamans transformed themselves into jaguars:

> They entered into a large underground room where they saw many jaguar skins hanging; black ones, spotted ones, yellow ones, etc. Curious, they hid. Soon enough they saw men come in. Each one of these took a jaguar skin and covered themselves with it (Wavrin 1927: 328).

The shamans were able to become jaguars by putting on feline pelts as if these were items of clothing.

If the power of jaguars lies in their clothing, so, it follows, they can also be divested of

that power by disrobing them. Indeed, it is reported in Ávila that some men, encountering jaguars in the forest and, unable to scare them away, have undressed to battle them. The logic seems to be that in this way, the jaguar will be forced to recognize that his power comes from his clothing and that his underlying nature is that of a man. The stories recounted regarding such battles portrays these as fights between two people and not between a person and an animal.

Wavrin similarly reports that men who encounter jaguars are not afraid of them and can do battle with them as if they were men because they know these jaguars were once men. When shamans die, he says,

> they are transformed into animals. The mean-tempered old men are reincarnated (*se encarnan*) as tigers: this is why the Indian does not fear the beast, which he sees as a man just like himself. This is what they say to [the jaguar] when they find him and they do not hesitate to engage in combat. If the man is well armed, if he has a good knife, a machete, he usually kills the beast, fighting one-on-one as equals (*de igual a igual*). Sometimes in the course of battle the man is wounded, and sometimes even killed by his adversary, just like between two warriors (Wavrin 1927: 335).

Similarly, Juanicu was once attacked by a jaguar and, armed with only a knife, was forced to engage in "hand to hand" combat with it. As he confronted the jaguar, he was reminded of some advice of the "old-timers" (**rucuguna**): One must always remain "face to face" (**ñabipuralla**) when encountering a jaguar; a person that turns his or her back to the jaguar will be attacked with a lethal bite to the back of the head. This is "practical" advice based on solid natural history observations; jaguars almost always kill their prey with a bite to the back of the skull. This is why, if sleeping in the forest, one must, it is said, always lie face up. Yet, it also articulates well with ideas of what kind of a being the jaguar ultimately is, where its power resides and how that power can be diffused.

There is always a possibility for intersubjectivity with a jaguar because just beneath its skin lies a human nature. Such intersubjectivity is marked by the possibility for eye contact. For

example, it is said that the jaguar is frightened of people that eat a lot of hot peppers. This is because when a jaguar and a person meet in the forest, their eyes also meet. When a person eats a lot of peppers, eye contact causes a burning sensation in the eyes of the jaguar. This burning is very similar to that produced when a jaguar canine that has been dipped in crushed hot pepper is placed in the eyes of children in order to make them strong like jaguars (see Chapter Five). The fact that people and jaguars can look each other in the eye and that this contact is "productive" and not dangerous for people points to how jaguars and people are seen, in many contexts, as existing on a similar existential plane (see Chapter Five). What differentiates humans from jaguars is a kind of clothing –here the jaguar's hide. Once divested of this clothing, the jaguar is revealed for what it is, a person.

***Clothing and Power***

This idea of clothing as conferring power seems to have a long history in the Ávila region. For example, the priest Pedro Ordóñez de Cevallos was sent to pacify the Quijos region after the 1578 uprising (see Chapter Six). A group of *caciques*, temporarily united under the paramount Diego Quispa Senacato in their insurrection against the Spaniards, agreed in their capitulation to recognize only the Spanish king instead. Senacato conceded as well but only, he insisted, after conducting the appropriate ceremony of divestment, "that is used among ourselves" (Ordóñez de Cevallos 1989 [1614]: 429):

> He sits on a big wooden seat (*tianga grande de palo*), which is similar to a chair, and there, when they make him a general, every *cacique* brings him something and they decorate him (*lo adornan*). He sat there very proudly; his lieutenant came up to him and he sunk down on one knee and then, as if by force, without opening up the hand (*sin abrir la mano por arriba*) he took from him an ornate small spear (*un dardo muy galano*), that he had in his right hand. Another came up and took a shield that he had wrapped around his other hand. Another, some feathers that are placed on the head like a crown. Another, more of these that were hanging from his back. Others, some golden breastplates (*patenas de oro*), that he had hanging from his neck. Another the gold nose plate (*las narigueras de oro*) from

> his nose. Another the lip plug (*la patena del beso de la boca*). Another the golden ear plugs. Another the beads from his neck and back. Another, some bones that were tied to the arms. Another, more bones that he had wrapped around his waists, along with some bells. Another the loin cloth (*moropacha*) from the thighs. Another, [the cloth] from his legs; in this way they left him in complete nudity (*en cueros*), with nothing, except for the **pita** string that they tie on, when they are born, around the waist [i.e., a penis string]. To see him at first gives great pleasure, because he is so well dressed (*galán*), with more colors than a macaw, and then later he looks pathetic (*es para reir al verle*). They make him a speech […] They say that he has used his office well, that they are only doing this because it is the custom, and so that from now on he would cease to be their general; and they reminded him that when they named him [general] they dressed him with all those [adornments] and kissed his hand, and now they took them off without kissing his hand, that he was [still] the *cacique* of his subjects; and that all of the adornments that they took off him were his, and they put them on that chair, and they received him as a friend and no longer as a lord (Ordóñez de Cevallos 1989 [1614]: 430).

Senacato's status as lord is dependent on the adornments and clothing he wears. Once these are taken off, he becomes a "friend" –a man among men, and no longer a lord. It is only in the wearing that "clothing" becomes transformative; he is allowed to keep these items but he is no longer allowed to wear them in public.

***How Clothing Functions***

As the above example illustrates, clothing need not refer specifically to vestments. Indeed, with its additional functions as a veil of modesty, adornment, and physical protection, the transformative power of clothing can become obscured. It is for these reasons that face paint, as it is used today in Ávila, can reveal how certain kinds of "clothing" can have a tranformational nature. Up to fairly recently (about the 1950's) face paint, made primarily of achiote (**manduru**, *Bixa orellana*, Bixaceae) was used among the Runa of Ávila and other communities both for decoration and to avoid being recognized by sorcerers (Oberem 1980: 142; cf. Porras 1955: 240). Today in Ávila, face paint is no longer used as an adornment. Indulging in its decorative qualities would today, one gets the sense, smack of savagery—an attitude no doubt enforced by the

missionaries and colonists. Although it has been stripped completely of its decorative function, it is still important. An artless smudge of raw crushed achiote berries on each check is enough, now, to confer the transformative and protective powers of this substance.

There are two occasions in which this form of "dress" is regularly used in Ávila. The first is when, after five days, a mother and her newborn child are allowed for the first time after birth to leave the house. A smudge of achiote on either cheek of mother and child will ensure that "the spirits of the dead (**aya**) will not be able to see them" ("**aya mana ricungapa**").[72]

As I discuss in Chapter Five, these spirits of the dead, or **aya**, are particularly dangerous. They are in a sort of limbo. They are not the actual souls (**alma**) of the dead; these, by contrast, are sentient and retain the "personality" of the deceased. As opposed to the **alma**, the **aya** are "soulless" spirits. They "turn into a categorically distinct kind of being" (**shican tucun**) that is "no longer able to love the humans" (**runata mana llaquin**) to which they, nevertheless, so desperately try to "attach themselves" (**llutarimun**) as they wander the earth. The presence of the **aya** can make people gravely sick, especially children. It is for this reason that the Runa are so intent on going "unrecognized" by them.

That the use of face paints as a kind of clothing that hides people is central to this strategy of protection is also evident from the following example. Two to three weeks after a person dies and is buried, a ritual feast, known as **aya pichca**, **aya buda**, or **aya tulana**, is held in order to rid the living of the dangers of the **aya** still in their presence. This ritual begins in the early evening and lasts well into the following morning. I participated in it once, on the occasion of the death of Jorge, the father of Ventura, Angelicia and Camilo.

The first part of the feast, beginning in the early evening and lasting the entire night until just before dawn, consisted of a drinking party in Jorge's abandoned house. Although there was a great deal of sadness (some women occasionally chant-wailed and cried) the mood for the most part was joyous. In fact, Jorge was treated as if he were still alive. Bowls of boiled armored catfish and bottles of drink were left on a bench beside his empty bed. When Angelicia came to leave

a bottle of the alcoholic beverage **vinillu** she spoke directly to him saying, "drink this sweet water" ("**cai mishqui yacuta upingui**"). As we were about to leave for a moment to go to Camilo's nearby house, her husband Sebastian said, addressing Jorge, "Ok grandfather, just wait, we'll be back in a bit" ("**shinaca yayarucu tiarangui, astalla shamunchi**"). Jorge was treated, as best as possible, as if he were still alive. For example, when Umberto, a neighbor, placed a bottle of **vinillu** on the bench saying, "here, drink this" ("**caita upingui**"), another fell off. This prompted someone to remark that, "in a drunken state [Jorge] is knocking over [the bottle]" ("**machasami tangaran**").

Despite the ways in which people treated Jorge as if he were still part of an intimate social circle of the living, the purpose of this ritual is actually to send Jorge's **aya** forever away, back to reunite with his afterbirth (**pupu**) that, when he was born, was buried in a spot (termed the **pupu huasi**, the house of the afterbirth) where his family was then living near the Huataracu River. The Runa maintain that only when the **aya** is united again with the afterbirth in the **pupu huasi** will this spirit cease its dangerous wanderings.

We stayed up all night, drinking and joking beside Jorge's bed. However, as daylight approached (the time when Jorge would have gone off hunting), the mood changed. People came around with achiote to smudge on everyone's cheeks. In this way Jorge's **aya**, which would soon be sent off back to the **pupu huasi**, would no longer recognize us, and he would not be detoured from his resting-place. Indeed, the **aya** are extremely dangerous and intersubjective encounters with them (i.e., seeing them or speaking with them) can cause death (see Chapter Five). It seems that Jorge's **aya** only became dangerous as it was to become separated from the living.

Our faces now painted with achiote, we took basketfuls of Jorge's possessions outside and placed them on a path that Jorge's **aya** would take to reunite with his afterbirth.[73] Children were notably present and they were encouraged to talk to Jorge as if he were alive, urging him to go on his way with phrases like, "let's go." Meanwhile, Jorge's close relatives got off the trail and hid in the forest. In this manner, the **aya**, now unable to recognize its family, friends, and neighbors,

was fanned along on its way (**tulana**) with the enormous leaves of **aya chini** (*Urera baccifera*, Urticaceae). Some felt a breeze as Jorge's **aya** departed. His hens, also placed in one of his baskets, became frightened—indicating the presence of the departing **aya**.

The plant **aya chini** that was used to fan off Jorge's **aya** is very similar to the stinging nettles. Along with these it forms the folk genus **chini** that conforms to the western biological genus *Urera*. A major difference, however, is that, unlike the stinging nettles, its leaves do not cause urtication. Besides certain medicinal uses, stinging nettles are employed in Ávila to contain or repel beings. Toddlers are kept from crawling out doors by placing branches of stinging nettles in the entryway. Dogs are similarly kept from coming inside by using the same strategy. Indeed, on the night that Jorge's **aya** was sent off, Juanicu and his family—who did not attend the **aya buda**—placed branches of **aya chini** in their doorways to keep Jorge's **aya** from entering their house. It is befitting of the phantasmal nature of the **aya** that a non-stinging variety of nettles is employed to ward it off. This is another example of the distinction, otherwise being made by the Runa with face paints, of the ontologically distinct status between the **aya** and the living.

***"Non-Clothing" as Clothing***

Clothing is a loose metaphor for a variety of accretionary substances that are at once related to the person –emanating or affecting it– yet separable from it. Like face paints, then, bodily odor and perfumes are also a kind of clothing. They have the ability to affect the underlying person by effecting changes in the appearance of bodies. Although among the Runa do not have the tradition of wearing fragrant plant armbands or using native perfumes, as is common elsewhere in Amazonia, odors and smells are important attributes that relate to and affect the Self in important ways.

The observations written in 1913 by a rubber estate owner that employed Runa on the Villano Curaray confluence gives some idea of the connection between certain kinds of body odors and ideas of personhood:

As they never wash with soap, they all exude a rank, unpleasant odor which they

> call *chompeto*. A woman who lacks this odor lacks attraction, since I have heard them, when talking about whites, single out as one of the white man's faults that he does not smell like a Runa [Indian], but only of soap. (Porras 1979: 40, bracketed comment in the original).

Although I have not heard this sort of statement made in Ávila, people there do not bathe frequently and they do not always do so with soap. It is said that if a hunter has bathed recently with soap animals can detect him from far away and escape.

The odors of soap and cologne are seen as a kind of "mask" that can offend sensibilities. Bautista, for example, commented to me that one must never wash a jaguar canine with soap or soap up or use cologne while wearing such a tooth as a necklace. In these contexts, these strong smelling substances are referred to as **jambi** (poison or medicine) and they anger jaguars. "It doesn't like them," ("**pai mana gustan**"), Bautista remarked. They can cause the jaguar's "life-breath to exit" ("**samai pasan**") the tooth. By washing with soap, such teeth will lose their power as a tool through which people can become a were-jaguar.

Body odors are also a kind of clothing associated with specific groups of people and they are also connected to their particular powers. It is said, for example, that the sweat of the Huaorani (**auca**) smells like bats. According to one story, when a Runa woman that had been captured by the Huaorani was retrieved by her husband, she was immediately dressed with clothing he had brought along on the rescue expedition specifically for her; like a true Auca she had learned to live comfortably naked. When they finally got her home she was also bathed in hot water to rid her of her "Auca" odor.

Nudity is also a kind of clothing. For example, there is a kind of were-jaguar known as **auca puma**. This is the jaguar of a naked "savage" Indian and, indeed, its hide is said to be smooth like the skin of a person. The Cushma (Cofán and western Tukanoan Siona and Secoya), whose distinctive feature for the Runa is the flowing tunic (**cushma**) they wear, are said to take a kind of hallucinogen similar to **aya huasca** and then take off this robe. Once naked, they transform themselves into a jaguar and enter the forest to hunt deer and then eat the meat of their prey

raw. In circumstances where nudity becomes a kind of clothing, odor becomes an even more important marker of a kind of personhood.

Odor, like clothing, is an index of a kind of essential property of beings. Although it has the power to change persons, its power derives, ultimately, from the primordial connection it is thought to share with certain kinds of bodies. During the Rubber Boom, as the Runa were enslaved and forced to tap rubber in Huaorani territory, there were many battles and raids between the Runa and their Auca (Huaorani) enemies. In fact, it is said that the capture of the Runa woman mentioned above was a reprisal for when the Runa captured a young Huaorani boy (who in turn had been captured in a punitive raid after the Huaorani had killed a Runa woman and child). This boy was raised as a Runa. He became "well settled" (**ali tiasca**) and accustomed (**ricurisca**) to a Runa way of life; like a Runa, he wore clothing and ate his food with salt. Nevertheless, "inside" he was really an Auca, people recount. This explained his unsurpassed ability to hunt birds with a blowgun, for the Auca are thought of by Runa and Europeans alike (Simson 1878) as superior hunters. He also began to fight with Runa boys, wanting to kill them. Although smells and clothing can make persons –this is why men can become jaguars by putting on jaguar hides– these attributes only get their power from certain imagined primordial connections with the kinds of ontological states they index.

The Runa also have certain kinds of odors. These are cultivated in order to maintain boundaries between them and other kinds of beings. For example, it is said that eating hot peppers and drinking liquor create certain human odors that keep the **supai** at bay (see also Macdonald 1979: 153; Kohn 1992). Similarly, when people that have been captured by the game masters are rescued, they are bathed with **ajus huasca** *(Mansoa alliacea*, Bignoniaceae), the garlic vine, and a locally grown variety of scallion (**ichilla cibulla**, **cai llacta cibulla**, *Allium sp*., Alliaceae). These pungent plants are considered to have specifically Runa smells that repulse the game masters.

Conversely, other substances mask human odors. Although I have not documented such

uses in Ávila, Macdonald, writing about the Runa living on the Arajuno River, reports that when people want to have contact with spirit lovers they must drink large quantities of **huayusa** (*Ilex guayusa*, Aquifoliaceae) and **chiri huayusa** (*Brunfelsia grandiflora*, Solanaceae), for these create what these beings consider a "clean and familiar odor" in contrast to the repulsive, "smells given off by the average human body" (Macdonald 1979: 153).

How people in Ávila can become empowered by "wearing" certain odors is evident from a legend that Juanicu recounted to me in which a Runa man, after following a herd of white-lipped peccaries for days, was confronted by the herd's game master. The man asked to be made a master of these animals. The game master acceded and called in the peccary herd. These came to the man as if they were his domesticated pigs and circled him and, in this way, rubbed him with their musk in the same way that peccaries leave their scent by rubbing their bodies against trees. By acquiring their musk, this man became their master:

**chipica chi huangana bula shamuca**
then when the herd of white-lipped peccaries came

**juiru juiru juiru juiru juiru**
they circled and circled (?)

**tucui runa intiru huaihua cuchishina jacurisca**
all of them, around the man, just like domestic pigs, they rubbed him

**jui jui jui**
circling (?)

**paipa asnaita churasca**
this is how [the game master] put their musk [on the man]

**huangana asnait-**
white-lipped peccary musk

**lla–g**
smeared on (?)

**amuta rangapa**
in order to make him a master

**amu**
master

**curaca**
lord

By covering himself with musk, this man was able to hide his Runa identity and make himself acceptable to the peccaries. In this case, peccary musk is like a form of clothing. In the same way that a man can become a jaguar by wearing a jaguar hide, so too can a man become a peccary master by wearing musk.

### *"Proper" Clothing*

How hides, face paints, and odors relate to personhood and how people can use these to empower and transform themselves is the context in which whiteness, as a concept and a tool, must be understood. Admittedly, whiteness is thought of in Ávila as skin color, but instead of indexing a set of purported genotypic attributes as skin might elsewhere, it is seen as a kind of clothing that can be appropriated, harnessed, and also divested.

Simson, writing of the western Tukanoan Piojé of the Putumayo, observed that, "when considering dress from the Indian's point of view, always keep in mind that to him it is more adornment than a veil of modesty and decency" (Simson 1879: 213). This insightful statement gets at two important points. The first is that the functions of clothing go beyond its ability to hide the body. In this sense, one wonders what "adornment" meant to the Piojé Simson wrote about. The second, of course, is that an important function of clothing, in European eyes, is its use as a, "veil of modesty and decency." These two points are applicable to understanding how

clothing is seen to capture the power of whiteness among the Runa; the "European" functions of clothing were adopted by the Runa and these have commingled with other important functions.

Early missionaries and religious figures were quite concerned with Amazonian nudity, and they criticized and covered it wherever possible. When Ordóñez de Cevallos negotiated the pacification of the Quijos he stated: "I dressed them and those that accompanied them because those are people that go around completely naked (*es gente que va en cueros*)" (Ordóñez de Cevallos 1989 [1614]: 425). The Jesuit missionary Rafael Ferrer, referring to his first contacts with the Tukanoan Coronado of the Aguarico river region, states: "In the first days [of my visit] it did not bother them at all to appear naked in public at any hour. Later they would only come out for prayers at dusk and finally they would not even come out then, instead they would ask to borrow *mantas* (blankets, shawls, skirting) to come out in public" (Ferrer 1995 [1605]: 398). By contrast, the Tupian Omagua were, "Indians with a certain sophistication (*indios de alga. policia*) because they go around dressed" (Ferrer 1605: 8a).

The ancestors of the modern Ávila Runa wore clothing, in large part, no doubt, because of the cooler climate in this region. They had the following vestments at contact: Men wore cotton shawls attached at the shoulders and a penis string, women wore only a cotton wrap around skirt. By the 17$^{th}$ century the penis string had probably been abandoned due to missionary influence. In the late 18$^{th}$ century men were wearing a kind of short cotton poncho and tight cotton shorts. This was worn until the 1920s, more or less (Oberem 1980: 135-136). Today in Ávila, women wear a short sleeved dress (**bata**) or skirt and shirt, invariably with a slip underneath, and men wear long pants and button-down shirts or t-shirts.

In many ways, the Runa today are much more reserved about nudity than most Ecuadorians. Except for in the intimacy of one's house, it would be unthought of today for a man to wear shorts. Regarding the abandonment of shorts for long pants, Gianotti writes in 1923 of the Tena Runa:

I also suggested to them that all the Indians should try to fashion long pants, at least [to

> wear] when they go to town, because, I told them, these would make them more respected by the whites and demonstrate that they were men, no more or less than the rest […] They liked this suggestion […] It is true that the habit does not make the monk, but I hope that this new style that I suggested to the Indians can little by little help raise the level of respect that the whites have for them and that it will also encourage the Indians themselves to live like the civilized peoples that all wear pants (*vivir como los pueblos civilizados, que llevan pantalones*) (Gianotti 1997: 253).

Gianotti no longer portrays clothing as a veil of modesty. That function has been thoroughly naturalized among the Runa by this time. Rather, he has a more ambitious function. Certain items of clothing, he believes, can enable Indians to become men, "just like the whites." Although his comments are condescending and ethnocentric –the Runa, of course, have never doubted their status as men—Gianotti does grasp how the clothing of whites can be empowering.

In many regions, the recognition that white clothing is powerful has existed since a very early time. The Tupian Omagua of the 18$^{th}$ century, for example, used a dark purple body paint ("*jagua*," *Genipa americana*, Rubiaceae) to paint themselves with the "clothing" of whites: "with this the men paint themselves, mainly on the legs, hands, and face, imitating in a peculiar fashion (*curiosamente*) the beards, gloves, and leggings (*botines*) or socks (*calcetas*) of the Spanish people" (Maroni 1988 [1738]: 306).

In her analysis of Curaray Runa memories and understandings of Rubber Boom era exploitation, Reeve recounts an oral history in which one Runa man remembered the over-inflated pricing that caused the Runa to be forced into a kind of debt peonage. This man asked, "How much were those balls of rubber worth? Remembering as if it were now, how much was it worth? For no good reason we Runa came into debt, we exchanged five or six ball of rubber for two lengths of cloth" (Reeve 1988: 27). From this, Reeve concludes:

> people were forced to accept goods for which they had no need […] [The] Runa traded rubber for cloth to make the clothing Europeans demanded they wear –a trade of what for the Runa was one useless commodity for another; thus the Europeans stole indigenous labor (Reeve 1988: 31).

Although Reeve is right to point out how the Runa were conscious of being exploited in a regional economic system, it is not clear, from the oral history she presents, that the Runa thought of the cloth used for making clothing as a useless commodity. Indeed, it seems from her own account that they thought of it instead as an item that was simply overpriced. As I hope to have shown, from the Runa point of view, clothing is not just a commodity and, regardless of whether or not Europeans for their own reasons made them wear it, it is anything but useless.

In fact, European clothing, far from being useless and simply a "veil of modesty," has become a quintessential marker of who the Runa are today in ways that are fundamentally Amazonian in logic (see also Vilaça 1999). It is ironic, then, that in Ávila, face paint—seen by so many as that essential marker of Amazonian identity—is used only when people want to hide from the dead, that is, when they no longer want to be recognized as the Runa that they are.

Clothing is not just a sign of acculturation and acquiescence but a tool to be strategically employed for appropriating the power of whiteness. This became evident to me in playful joking associated with drinking parties in Ávila. On a number of occasions older men would suddenly put on my backpack and strut around and then ask me to take a picture of them carrying my pack.

On another occasion, at a wedding, a drunken man from Huiruno (a community of people that migrated from Ávila a generation ago) approached me and, without a word, began to rub his smooth cheek against my beard stubble. It was in this context that, soon after, another younger man from Huiruno asked me to, "blow [your life-breath through the crown of my head] so that I can acquire your knowledge" ("**pucuhuai, camba yachaita japingapa**"). Because of my status as a white foreigner who, additionally, was able to speak Quichua and was knowledgeable and accepting of local life ways, I was seen as a powerful person. This is why the young man was so intent on acquiring my "knowledge" through a shamanic transfer of life-breath. These Runa men felt that my supposed knowledge and power could be appropriated by contact with my clothing (i.e., my beard and my knapsack).

***Priestly Clothing***

I now want to turn to an extremely important item of clothing in Runa cosmology, the habit of the priest. I want to do so in order to examine how a particular kind of notion of white power resides in it. In Ávila a kind of demonic spirit known as a **supai** is thought of, almost invariably, as wearing the black robe of a priest. Some excerpts of a story Hilario recounted about one such being, known as the **huaturitu supai** (the nocturnal curassow demon) indicate how the power of these demons is tied to their robes as well as how this power is experienced by the Runa.

This demon wears a habit and, in what seems to be a demonic transformation of praying, it sings like the nocturnal curassow as it cradles a book. Hilario described its dress in the following manner:

**intiru**
just like a real

**ñucanchi**
what we call

**padri ninchu**
a priest

**mi- mi- misiuncuinta churasca casca nin**
it was wearing it just like a mi- mi- missionary

**sutana nin**
a habit

(*indicating with his hands*)

**caicaman**
it went down to here

**churasca**
that's what it was wearing

•

**caimandaga**
and from here

**butunga pasajta ña**
buttons going all the way down

**charisca nin**
it had

**chai churarisca nin**

that's what [the demon] had on

According to legend, a hunter encountered this demon and foolishly shot at it with his blowgun. The dart stuck in the demon's habit:

**sutanapi**
right into the habit

**cachamusca nin**
he sent

**birutita**
a dart

(*quietly*)

**toc'**
[sound made when firing a blowgun (?)]

**imana–chu rirca**
how did it go

(*louder*)

**to'**
[imitation of sound made as the dart penetrated the habit]

**uyarisca nin**
was heard

**birutiga huale– huarcurisca nin**
and the dart was hanging, swaying to and fro

**huamburisca nin**
floating

**casi ricusca ña**
[the demon] was calm and still as he looked around

**pailla riparasallata**
but he knew exactly what happened

The foolish hunter continued to shoot darts at the **supai**. Finally, the demon removed a dart and smelled it so that he could follow this man's scent. The demon then took off through the forest in order to kill the man. This is how Hilario describes the terrifying sound the habit makes as the demon runs over to catch the man

**chai**
then

(*rapidly in staccato bursts*)

**pʰu pʰu pʰu pʰu pʰu pʰu pʰu pʰu pʰu pʰu pʰu**

[imitation of the habit beating in the wind as the demon runs]

**pu calpasca risca nin**

he took off running

**paiga sutanallahua ña**

just with that habit on

**calpasa ri pacha**

he really ran

It has been many years since the priests in the Ávila region stopped wearing habits. Yet in this region, such vestments continue to be imagined as capable of tapping a certain kind of power that is associated with whites. I believe that the habit has come to figure so prominently in Runa cosmology because of a specific conjuncture of meanings held by both Amazonians and missionaries pertaining to the ways in which this article of clothing is seen to relate to the person it covers.

Indians have latched onto the idea of the habit as a powerful object in large measure because of the ways in which the missionaries treated this item of clothing. For missionaries, the habit was seen as an extremely important part of Jesuit identity. For example, the Jesuits did not wanted to keep a certain lay brother (*hermano*) Herrera from proselytizing. Adamant that he wanted to continue in his missionary efforts, however, this man, "continued to protest that he would not permit them to remove his habit without first taking his life" (Maroni 1988 [1738]: 286).

Why is it that the Jesuits saw the habit as so powerful? A comment that Father Luzero makes in a 1681 report from the Lagunas mission on the Huallaga River is insightful in this regard:

> The habits are of rough cloth (*manta*) and they afflict our flesh (*sobre las carnes no dejan de congojar*), although it is with great joy (*consuelo de entender*) that we serve such a Magnificent Lord: *Nudos amat eremus* [the hermitage requires the naked, i.e., those that have stripped themselves of all that is superfluous], said the revered *San Gerónimo*; and with that, in this parts we have no need for anything else (in Maroni 1988 [1738]: 226).

Clothing, and the rough habit especially, was seen by the missionaries as something that covered and oppressed a very carnal and fragile body. Rather than naturalizing clothing as our fashion industry might –focusing as it does on "comfort wear"– the habit was meant to be "marked." Through it, it seems, the Jesuit was supposed to be constantly reminded that his clothing was uncomfortable and beneath it would be found a shameful body. This idea of clothing also makes eminent sense in Amazonian terms. This is not because of the idea that nudity is necessarily shameful or that clothing should be uncomfortable, but because the habit, by being uncomfortable, is not naturalized and therefore it is eminently detachable from the body. This property, and the concomitant ability to be re-attached to another body that it implies, is what permits the habit to be seen as so powerful.

The missionaries were well aware that the Runa saw their power as residing in their clothing and accoutrements. Regarding the threat of Protestant missionaries making incursions on Catholic territories the Josephine Gianotti quoted a Runa in the 1920s as saying: "Have no fear Father [in the original **yaya-yaya**, or father-father]! I know full well that the demon-Father (**supay-yaya**) has a wife, that he doesn't wear a long skirt (*falda larga*), that he has no beard, that he does not say mass, that he has no crosses, or medals, and that he knows nothing" (Gianotti 1997: 110). This man's words seem to indicate that the Catholic priest's knowledge and power is explicitly connected with the things he uses to adorn his body.[74] This is the context in which whiteness must be understood. The symbols of priestly power emanate from a configuration of attributes that in many ways can be glossed as white (and indeed, the Runa often glosses it in this fashion) yet others can don these symbols: Indians, priests, and demons alike.

If robes were seen by Amazonians as empowering priests, then, it logically follows, priests can be dis-empowered through disrobement. This is exactly what happened in an 1871 attack against a Jesuit priest in Archidona. The Runa, who had been drinking at a wedding, decided to rebel against the "foreign priest" ("*padre forestero*") because of the Jesuits' excessive demands such as their desire to make the Runa carry lumber (Jouanen 1977: 44; see also Oberem 1980: 115) and their attempts to make Runa children read, "which was something that they did not want, being something they thought reserved only for whites" (Jouanen 1977: 44). The resident priest, Father Manuel Guzmán, recounts how the Runa during this rebellion attacked him:

> In an instant, in one voice, the Indian women cried out: "**huañuchichi**" (kill him). So, from below, jumping up, they grabbed me by the habit and they hung onto it until, torn to shreds, and along with the sash and the rosary, everything remained in their hands; because of that, I was able to escape. Seeing that I had evaded them, they said: "**Supay quishpirirca**" (the demon of the father has freed itself [(*el demonio del Padre) se libró*][75])…" (quoted in Jouanen 1977: 45, all parenthesis in the original).

From Guzmán's description of the attack against him, it seems that for the priest and the Runa alike, his power resides, in part, in his habit and the other paraphernalia that makes up part of his custom.

**Becoming White**

Runa understandings of how to harness whiteness is somewhat different from the ways in which this process is viewed in other parts of Amazonia. Peter Gow, for example, has argued that the Piro of the Urubamba River region in Peru have appropriated colonial discourses about race and savagery, but only to a certain degree. Although they see themselves as "*gente civilizada*" (civilized people) vis-à-vis the "savage" Indians, this identity, "ceases to be an image of defeat when viewed from the perspective of the imagery of the gringo as one who is too 'civilized' to even reproduce" (Gow 1993: 342).

As opposed to the situation on the Urubamba, whiteness in Ávila has become something much more pervasive, and accordingly, much more difficult to extricate as a redeeming critical tool. It does not easily figure into a moral narrative of indigenous resistance to outside oppression. I do not mean to say that in Ávila people want to become white in the usual sense of "acculturation." Rather, whiteness has permeated every aspect of self-identity in ways that are both ambiguous and contradictory.

One way to explore how the image of powerful whites has permeated Ávila cosmology is to look at the use of the term "*amo*." This means lord or boss in Spanish and has served traditionally as a term of address for estate owners and government officials. For the Runa, its power is associated with whiteness. In the mid-19$^{th}$ century, for example, a black man named Goyo was appointed governor of the Amazonian administrative region which was known at the time as the Oriente province. Because this new governor was black, the Runa refused to treat him as an *amo*. He was therefore forced to ask the previous governor, Manual Lazerda, to continue as acting governor. As Lazerda recounts:

> The Indians believe that blacks are cursed peoples (*gentes malditas*), charred in the infernal fires. They'll never obey Goyo. I'm his friend and I'll do his bidding. (*Yo soy su amigo y haré sus veces*.) The earnings [primarily from forced sales to the Indians] will be divided in two parts: one for me and one for him. Alone he wouldn't be able to make anything (*Solo no haría nada*). The catechized Indians will never recognize him as their **apu**.
>
> -What does **apu** mean?
>
> –Master, lord (*amo, señor*). I will be for them their real master and lord (Avendaño 1985 [1861]: 152).

In Ávila today, the concept *amo* –Quichuicized as **amu**—retains its meaning as a reference to a figure made powerful because of whiteness. Paradoxically, however, it has also been appropriated as a term that signals the subjective perspective of the Runa. Following the logic of

the perspectival model I presented in the previous two chapters, the Runa project a vision of their society onto all sentient beings. That is, all beings, be they people, spirits, or animals, see themselves as Runa. Related ideas are quite common throughout indigenous Amazonia. What is interesting about the Runa case is how whiteness has become central to definitions of Runa personhood. Therefore it has also been projected on the entire universe as an essential element of the subjective perspective; all beings, after all, see themselves as people. In this section, I will show how this works and how it may have come to be.

### *The Self as Amu*

I first came across the use of the term **amu** and the related term **duiñu** (from *dueño*, Spanish for owner) as terms used to refer to the Self, at drinking parties. Although at these parties people are free to gradually sip manioc beer from the bowls that have been distributed to them, harder forms of alcohol are more aggressively plied. During such gatherings it is quite likely that someone will have a bottle of **vinillu** (a wine-like drink made of the liquid that has dripped out of the fermenting manioc dough that forms the base of beer) or, equally as common, a bottle of **cachihua** or **trago** (distilled contraband cane liquor). This person, armed with a small cup, will slowly make the rounds of those gathered, offering to each individual a shot that is to be gulped on the spot. It is offensive to turn down such an offer. I quickly learned that if I wished to delay drinking I had two options that were deemed acceptable within the bounds of local etiquette. The first was to engage the offerer in small talk and thus postpone ingestion. The second was to oblige him or her to drink the shot before ultimately repouring the shot I would have to drink. The formula I quickly learned to utter in order to obligate my server to drink is, "**amu**" or "**duiñu**" –implying that the server should serve him or herself first. Under these circumstances **amu** or **duiñu** is used to temporarily reverse the direction of the flow of the exchange relationship. Although these terms were originally used in Spanish as nouns to refer to whites and their position of power, here they are being used as a second person pronoun to address natives.

In the above instance, the use of the term **amu** conjoins a reference to selfhood with a certain sense of ownership that is underscored by the use of **duiñu**, in this context, as a synonym. This sense is also conveyed in an additional example. At one point in Luisa's discussion of a **runa puma**, or were-jaguar, that had killed her family's dogs, she referred to it as, "**amu huañuilla**." What she meant was that the human, or owner, of the jaguar spirit had died and, for that reason the soul that was previously in the human body had come to inhabit a jaguar body that was roaming around, killing dogs.

The use of **amu** has become pervasive in Ávila as a marker of the subjectivity of a variety of beings in contexts that do not necessarily denote ownership. This indicates how concepts of whiteness have become so naturalized that their power permeates the landscape. For example, at a drinking party Narcisa recounted her experience of seeing a doe together with its fawn the day before (see also Chapter Five):

**murullashtumar carca huahuashtupash sna'**
it was a little mottled baby

**amu –rullashtu**
the **amu** was mottled

**lumuchashina carayu**
as if with the hide of a paca

Here, the young fawn, still with its white mottling, is referred to as **amu**, the subject of the discussion. Later in her recounting, Narcisa uses the term **amu**, combined with the topic marker suffix **–ca**, to underline the fact that she had shifted the topic of discussion to her own individual capabilities. The night before she was "dreaming well" ("**ali nuspasa**") so when she saw the doe, she thought she would easily be able to get her husband to kill it:

"**cunanca huañuchichinga ranita**" **yanica amuca**

"therefore, I'll be able to make it so that [my husband] kills [the deer]," I –the **amu**– thought

Narcisa's "good dreaming" was the important action. Her husband's ability to shoot an animal was simply a proximate extension of this (see Chapter Five). This is why *she* is the topic of this phrase –as marked by **amu**– and not her husband.

In another example, Maxi described to Luis how he was in a hunting blind next to a fruiting **chunda** palm tree. When an agouti came by to feed, Maxi was able to shoot at it from a very close range. He then went to look for his quarry in the overgrown brush

MA: **huit- úcuta mascarcani**
I searched for it in the overgrowth

LA: **amuca api tucuscachu**
was the **amu** [the agouti] hit ?

MA: **api tucusca**
yes, he was hit

**siquí'**
in the back

**siqui tullulla**
the back bone

(*interrupting*)

LA: **tias pitis- canga**
it must have been cut clean through

MA: **ahá**
yeah

To change the topic of discussion from a focus on Maxi's action to the predicament of the agouti,

Luis uses the word **amuca**. This focuses attention on the agouti-as-subject rather than on Maxi.

Amu can also be used to refer to non-sentient objects in some contexts. In a discussion of the various places he has seen fruiting **sindi muyu** trees (*Prunus debilis*, Rosaceae) –an important resource for peccary, deer, caviomorph rodents, and terrestrial birds– Ascencio tells his neighbor Alejandro:

> AG: **cuna amu chaira taliramun yarihuan**
> the **amu** [i.e., the tree] is still dropping its fruits [literally, spilling them], it seems
>
> **taliramun**
> spilling them
>
> **sarun punjalla canga ña** […]
> it was just the other day [that I saw it in fruit]
>
> AJ: **a–$^{h}$ talirangatá'**
> Oh, so it must still be fruiting

In this context I do not think Ascencio is treating the tree as a sentient agent. **Amu** in this case refers simply to the subject of the oration.

These examples indicate how thoroughly naturalized the concept of **amu** is in Runa cosmology. The term **amu**, referring to a title that the Runa, as Lazerda observed, would only bestow upon a white person, has additionally come to refer to the Runa Self. By extension, **amu** also refers to the point of view of any sentient being; from the subjective perspective, all beings see themselves as Runa and, additionally, as masters.

The term **jinti** (from the Spanish, *gente*, or people) is another example of the way in which a Spanish category becomes naturalized as a marker of personhood. For example, in interviews conducted using recordings of bird calls (Moore 1994), Ventura identified a vocalization of the casqued oropendola –known in Ávila as **buhya mangu** or **auca mangu**—as being a call from the **curaga**,

or leader of the flock, to its **jinti** so that they would build a nest. Similarly, it is said that the **curaga** of a troop of peccaries stays up all night guarding its **jinti**. Regarding the **uchu cara** toad (*Bufo "margaritifer"*), only the large male **curaga** can be eaten (once the poison glands are removed). Smaller females and juveniles –referred to as **jinti**—cannot. **Jinti** is also used in general to describe large flocks or troops of animals. Coatis, found in groups of up to thirty (Emmons 1990: 138), for example, are described as, "**jinti purin**" (moving about in large groups). Also, around the cinereous antshrike (**guchiquiri**, **cuchiquiri**), mixed flocks, referred to as **jinti**, congregate.

Natives of the Urubamba use the term *gente* to refer to "civilized" natives and whites alike but not "wild" Indians (Gow 1993: 334). This term is not used in this form in Ávila. Nevertheless, as a Quichuicization of a Spanish term, **jinti** in Ávila does allude to a congregation of a certain kind of people. This image of sociability, tinged as it inevitably is by Spanish, is projected onto the realm of animals in much the same way that **amu** is.

The inclusion of **amu** as an element of Runa selfhood is one indication of how Runa identity, "has manifested itself and changed through a dialectical relation with historical conditions" (Muratorio 1987: 258). This observation, however, prompts the questions: Just how is identity connected to history? Which outside elements do the Runa seize upon? Why do they reject others?

### *Indians and Aucas*

Crucial to an understanding of this process by which whiteness has become central to Runa ideas of selfhood is the category "Indian." For some, it only is applied in the Ecuadorian lowlands to Quichua-speakers. That is, only those groups that have had sustained contacts with whites are considered Indians. According to Simson, "Indians" speak Quichua, eat salt, and are "semi-Christianized." "*Infieles*" (infidels) or "*ancas*" (i.e., "*aucas*") speak a variety of languages, do not seek out salt, and are generally unbaptized (1883: 21):

> to avoid confusion, it must be borne in mind that whilst in the *Provincia del Oriente* of Ecuador, I shall –to use its technicality—when speaking of the non-salt-

> eating, uncatechised tribes, call them *Infieles* or *Ancas*; and when "Indians" are mentioned, the name must be taken to refer only to the Quíchua-speaking, semi-Christianised peoples (Simson 1883: 22).

For Simson, then, Indian only applies to a colonized people; savages are not Indian.

Simson's observation that the adoption of Quichua permits the existence of an identity that is both indigenous and able to draw on the power of whites is a good one. Indeed, before the advent of Quichua in the Amazon as a *lingua franca* many groups considered people who did not speak their language to be mortal enemies. Among some early colonial Upper Amazonian groups, foreigners unable to speak the local language were killed (Mercier 1985: 56). And among the Tupian Cocama of the Marañon and lower Ucayali a white soldier who was able to speak their language was identified as the soul of a deceased *cacique* (Figueroa 1986 [1661]: 267). It seems that for many Upper Amazonian groups, speaking the local language was equated with being able to share a perspective, and by extension, being a person.

The introduction of Quichua as a *lingua franca* in Ávila and much of the Upper Napo region, then, is a significant departure. Although it was an indigenous language, it was also readily understood and spoken by the relevant European and Hispanic colonial mediators such as priests and government officials. With the advent of Quichua, as a *lingua franca* and eventually as a *lingua materna*, selfhood, as defined by language barrier isomorphic with an ethnic frontier, no longer stopped at the border between Amazonian and European. The notion of Self was able to expand into white domains as well.

In Ávila today, the ways in which the Runa self-identify has clear roots in colonial, especially missionary, efforts to define them and change their lifeways. According to the Jesuits, Christians, as opposed to savages, do not commit homicide nor should they engage in polygamy (Figueroa 1986 [1661]: 249). Among the Runa, missionaries were quite successful in this regard. The Runa are now monogamous and, as Villavicencio remarked in the mid-19$^{th}$ century: "Among these Indians, homicide is so rare that many years pass without this crime taking place"

(Villavicencio 1984 [1858]: 358). Two other important attributes of Christians that were imposed and later adopted by the Runa were the wearing of clothing and eating salt.[76] In sum, the prohibitions on homicide, polygamy, and the use of salt and clothing were markers of a certain kind of personhood that was imposed on Upper Amazonians by missionaries. Among the Runa, these markers have been readily adopted, albeit not always in the ways they were intended.

Regarding Amazonians, the missionary goal was to, "transform them from brutes into men, and from men into Christians" ("*hacerlos de brutos, hombres, y de hombres, christianos*") (Figueroa 1986 [1661]: 249). Whereas missionaries had a primitivist model in mind whereby Amazonians were thought of as savages that had to evolve progressively into people and then finally into Christians, the Ávila Runa today see things very differently. Whereas both missionaries and the Ávila Runa agree that the markers of proper personhood include salt-eating, wearing clothing, and abstaining from homicide and polygamy (cf. Muratorio 1987: 55), they disagree on how these traits came about. The missionaries see these as having come about through a process of the gradual disciplining of a brutish Amazonian substrate. In Ávila, however, such "civilized" qualities are seen as primordial aspects of Runa humanity. A myth told in Ávila today that explains the difference between the Aucas ("savages") and the Runa illustrates this:

> There was a flood for forty days and nights. Only the faithful were saved by climbing to the top of Yahuar Urcu. Some people boarded canoes as the water rose in order to save themselves. The women twined their hair to use as moorings. When these became unfastened, the canoes floated down river and came to rest in present day Auca (Huaorani) territory. There the clothing of these Runa eventually wore away and they also ran out of salt. They began killing people and became the present day Aucas.

For the Runa then, the Aucas are not the primordial savages from which the Christianized Runa evolved (cf. Rogers 1995). Rather, the Aucas are fallen Runa. They too were once salt-eating, clothed and peaceful Christians. Although the Quichua term Auca is generally translated as infidel or savage, it may be more accurate to think of Aucas as apostates. They are people that have

abandoned their former Runa way of life. In this regard it might do well to recall Gonçález Holguín's early definition of "**Aucca**," not as infidels, savages, or even heathens but as an, "enemy and traitor" ("*enemigo traydor contrario"*) (1989 [1608]: 38).

That Aucas are thought of as primordially Runa has tremendous implications. It points to a pervasive ethnocentrism; all beings were originally Runa. Although such ethnocentricism is typical of many Amazonians (and others as well), what differs are the markers that define Runa indigenous identity and by extension the Self. Many of these have emerged from the colonial situation in which the Runa have been enmeshed.

***How Whiteness Has Become Central to Runa Identity***

The Runa are faced with a profound intellectual challenge: they live in a world where whites are demonstrably powerful and, additionally, where whites are intent on imposing a world view that justifies that power. The attempt to impose this view is evident from a document written in 1913 by a rubber estate owner on the confluence of the Villano and Curaray who had a group of forcibly recruited Runa under his command

> In order to convince them of the superiority of the white man over the Indians, by reason of our customs and knowledge, and to rid them of their hatred of the Spanish language, a neighbor of mine on this river, a rubber man, employer of many laborers, called together all the Indians one day and showed them a figure of Christ. "This is God," he said to them. Then he added: "Is it not true that he is a **viracocha** [white man] with a beautiful beard?" All the Indians admitted that he was a **viracocha**, adding that he was the *amo* [lord] of everything (Porras 1979: 43).

How can the Runa reconcile the claim that God is white with a local ethnocentric cosmology? Ignoring this claim was not an option. The Runa solution has been to redefine the universe in such a way so that whiteness becomes an integral part of self-identity (see also Kohn in press).

This process of redefinition in Ávila is evident in the way the images of the apostles

(**apustul**) have become central to local mythology. There is an interesting concordance between Amazonian and missionary thinking regarding the apostles. Missionaries explicitly refer to the "time of the apostles" (*época apostólica*) as an era when miracles were possible and commonplace, and because of this, they contrast it with the present in which miracles are rare (Gianotti 1997: 98). The idea of a time, well before the Spanish conquest, when apostles roamed the Americas was a belief commonly held by those Jesuits that proselytized in the Upper Amazon. Rafael Ferrer, for example, writes of finding footprints and Greek writing inscribed in stone in the vicinity of the Coca River (Ferrer 1605: 5, see also 9). Other Jesuits held similar beliefs (e.g., Figueroa 1986 [1661]: 279; Maroni 1988 [1738]: 282).

The missionary idea of an *época apostólica* is in some ways very similar to Amazonian ideas of mythic times. Indeed in Ávila today, mythic times are explicitly referred to as **apustul uras** or **apustul tiempu**.[77] This was a time when the apostles were present. They were white men who were sent by God from down river to make the Runa into Christians, according to some people. According to others, they are associated less with Christianity and more generally with a mythical "epoch when there was no forest" ("**sacha mana tiasca uras**"). During this time there were no hardwood trees and the vegetation was soft (**llullu**) (see also Wavrin 1927: 329-330). Because the forest was so soft in **apustul uras**, people in Ávila say, there was no need for steel axes; stone hatchets were sufficient. This is why the pre-Hispanic stone axe heads that are commonly found around Ávila, especially after heavy rains wash away topsoil, are referred to as **apustul acha**. Because there were no palms to provide thatch, the leaves of a viny grass known as **suru** (*Chusquea* sp., Poaceae) were used instead. Indeed, some say that at this time this was the only plant to be found in the forest. In those days people did not eat manioc. They only ate corn and various tubers such as **papachina**, **mandi**, and **chumbi mandi** or **patu** (all *Colocasia* spp., Araceae). During this time there was also no game meat.

Despite these differences, the apostles lived much like the Runa do today. For example, when **jambi**, a shrubby cultivated fish poison (*Lonchocarpus utilis*, Fabaceae-Faboideae) is found

growing in primary forest (where it can become a sizeable liana), its presence is often attributed to the fact that the apostles planted it there in mythic times. The apostles also climbed to heaven on the "monkey ladder" liana (*Bauhinia guianensis*, Fabaceae-Caesalpinioideae) which is called **apustul angu** in Ávila. The apostles are also credited with creating many of the foreboding features of the world such as mountains, waterfalls, and cliffs, as well as anacondas and snakes (see also Mercier 1979: 14, 17).

In Ávila myths, the apostles have become culture heroes, replacing the traditional brothers known as **Cuillur** and **Duciru** in the myths of other Upper Amazonian Quichua communities (e.g., Orr and Hudelson 1971). Early missionaries, such as Rafael Ferrer, would usually travel through the Amazon with a lay brother (*hermano*). This may be one reason why the image of two wandering priests (one who is referred to as a brother) may have come to replace the culture hero brothers. This is evident, for example, in the myth presented in Chapter Three in which the apostle traps a man-eating jaguar in a stone house. Orr and Hudelson document the same myth featuring the **Cuillur/Duciru** brothers instead (1971:24-25, cf. Wavrin 1927:327 for a similar version documented from a Loreto Runa). The apostle culture heroes also figure prominently in an Ávila myth about cutting down the fish-bearing tree known as **challua yura** that explains fish scarcity in Ávila today.

Another example of how the apostles have replaced the traditional culture heroes comes from descendents of Ávila Runa that were resettled as slaves on the upper part of the Peruvian portion of the Napo during the Rubber Boom:

> The Father Apostles were just two, brothers to each other, that's what I heard. The Father Apostles don't procreate, they're just there, they don't have children, they didn't live with wives; they lived just like God. Those [brothers] climbed up, after resolving everything [here]. Even now they still probably live right up there with God. They ascended after teaching [the Runa] everything. Judgement Day befell us; that's why they ascended. They didn't like Judgement Day (Mercier 1979: 61).[78]

Here, befitting of culture heroes, the apostles are responsible for imparting knowledge to the Runa.

In other related traditions, the apostle culture heroes are explicitly associated with white priests and their power. For example, Wavrin recounts a legend told by a Napo Runa who stated that, "in other times the region was inhabited by God and the Saints." During the flood, God built a steamboat in which he escaped along with the saints. They floated up to heaven. When the flood receded, their abandoned boat washed up in the land of the foreigners ("*extranjeros*"). By observing this boat, the foreigners learned how to make ships as well as other machines (Wavrin 1927: 329). According to this myth, then, the original owners of modern technology are figures that are both white and Amazonian. Only foreigners have access to modern technology –instead of the Indians– because they were able to obtain it when the Amazon region was flooded; the discrepancy in access to technology between locals and foreigners is of modern origin. In some sense, then, the Runa now are the ones who become apostates –fallen Runa like the Aucas in the myth described earlier– and the foreigners are the good Runa.

Karsten has also noted how the Shuar refer to whites as their "forefathers:" "According to their idea even the whites have once been Jibaros; they are therefore called *apachi* i.e., forefathers. There is properly only one human race, namely, the Jibaro race" (Karsten 1935: 504-505). This example is important because it indicates that it is not a question of Indians becoming whites, as an acculturation-oriented model would suggest, but of whites becoming incorporated into an Indian notion of selfhood.

Referring in general to the beliefs of Indians under the Jesuits, Magnin (1988 [1740]: 477) states: "they say that they are baptized; because they have a [Christian] name; that all of them are Saints; and that none of them will go to Hell, instead they'll all go to heaven, where their relatives are, Saints like them."

It is not, then, a question of whether or not natives worship whites as gods (Sahlins 1987, 1995; Obeyeskere 1992) but the process by which natives come to see *themselves* as gods. It is

in this context that the notion of apostles becoming culture heroes should be understood.

### *The Relational and Contextual Nature of Whiteness*

Viveiros de Castro (1998: 472), citing Descola (1986: 20), has emphasized the important distinction made by Amazonians between humanity as a condition and humanity as a species. When Amazonians say that animals are people, they do not mean that they too are *Homo sapiens* but that, from their subjective viewpoints, they share attributes of humanity such as the same culture, motivations, and values. It is in this sense –as a condition and not a species– that whiteness must be understood in Ávila (Taylor N.D.: 6,8). This explains why **amu**, in one context, can be a term applicable only to white governors to the exclusion of blacks –here the notion of white as species applies– and, in another, it can refer to all sentient beings, including animals. It also indicates why the Urubamba notion of *gente* can include civilized Indians and whites to the exclusion of "savages" and a similar use of the term –admittedly in a different region and context– can be used to refer to the sociability of animals.

The insight that whiteness is a condition and therefore something that can be acquired explains why Amazonians can see themselves as empowered by whiteness and Christianity and yet simultaneously be critical of Europeans (see also Vilaça 1999). This is evident, for example, in present-day oral traditions from Oyacachi, a Quichua-speaking montane village west of Ávila, in which the Virgin Mary is remembered as an autochthonous native and European priests are remembered as pagan impediments to her (Kohn, in press).

Whiteness denotes a position of power in Ávila. It is marked by certain attributes of European, western, or modern origin. But who is endowed with these attributes is relative and changes according to context. Whites are not always white and, similarly, Indians are not always Indian. Who is white and who is Indian depends on point of view and a context-dependent balance of power.

The shifting nature of whiteness can be better understood by examining colonial accounts

of the important 1578 uprising in which natives from the Ávila region participated, and comparing these to modern Ávila oral traditions, that I believe are related to this event. In 1578 there was an organized rebellion of Indians of the Quijos region (around the lowland Spanish settlements of Archidona, Ávila, and Baeza) whose aim it was to overthrow Spanish rule in the lowlands and in Quito as well. The *encomenderos* of Ávila and Archidona found themselves in an unprofitable region and were therefore overworking the native population to produce tribute. The immediate cause of the uprising, however, seems to have been the stepping-up of cotton textile production, through forced Indian labor, to pay for a Royal Visit mandated by the Crown. Two men, Beto and Guami, described as "lords and headmen (caciques y hombres principales) led the rebellion as well as "sorcerers" (*hechiceros*) (Toribio de Ortiguera 1989 [1581-1585]: 361). Beto, from the Archidona region had a vision:

> This appeared to him in the form of a cow, and spoke with him…and told him that the God of the Christians was very angry with the Spaniards that were in that land. That they should rise against them (*que diesen sobre ellos*) and kill them, without leaving any of them alive, not even their wives or children (1989 [1581-1585]: 361).

Guami from Tambisa, a community under the control of the Ávila *encomienda*, had a similar revelation:

> he deluded himself (*se fingió*) thinking that he was transported out of this world (*de esta vida*) for five days, during which he saw magnificent things, and the God of the Christians sent him to kill everyone and burn their houses and crops (*huertas*) (1989 [1581-1585]: 361)

Guami eventually became leader of the entire uprising (1989 [1581-1585]: 362). The attack was a sort of Trojan horse:

> On the very day of the assault they came in to town with a big trunk of *cedro*[79] for the house of their lord, with all the Indians pulling it; these, when they participate

> in this kind of activity, are accustomed to go as if dressed for war, with their faces and arms decorated with different colors and patterns, and with weapons as if they were going to war, and with this trickery (*disimulación*) they entered and killed their *amo* (1989 [1581-1585]: 363).

After killing all the "*cristianos*" (i.e., Spaniards and their mestizo and Indian servants), the Indians looted the settlement and then continued to erase all vestiges of the European presence from the landscape: "And their wrath and rage against the Spaniards was so great, that they didn't even want to leave one trace of them standing" (1989 [1581-1585]: 369). The Indians burned the settlement to the ground and then destroyed all the crops of European origin. These included: "the orange trees, citruses (*cidras*), and figs and other Castillan trees that the Spaniards had placed in their orchards" (1989 [1581-1585]: 370). Only one white survived –a girl who was hidden away in the forest by her Indian servant. After spending the night in the forest these two were found by an old Indian by the name of Quinafa who took pity and saved her:

> And because he saw that she was still a girl and beautiful, he became fond of her, and so that the others would not kill her, he took of her cloak (*hábito*) that marked her as a Spaniard and dressed her with another befitting of an Indian, smearing on her white and pretty face the juice from some herbs that the Indians use as make up (*de mudas*), with these he made her look in such a way that nobody would think of her as anything but Indian, it also helped that this little maiden spoke the native language as well as the Indians themselves, as if she had been drinking it with her mother's milk. This Indian took her to his land, where he presented her to his *cacique* and lord Jumandi, but when the *Pende* [shaman-lord] that was staying over on his way back to his home saw her, he wanted to kill her; Jumandi got on his knees and begged him, saying that since God had saved her from death up to that day, that she should be spared, and because of this [the shaman-lord] conceded. And this was because God wanted to save her, so that she would be the only survivor of that city (1989 [1581-1585]: 370).

Several Ávila myths explore cataclysmic relations between the Runa and powerful beings in ways that are strikingly similar to the events of 1578 as described above. These illustrate how

whiteness and power do not map easily onto ethnic groups. Ávila myths of how the **juri juri** demons attack the Runa (see also Chapter Three) are one example of this phenomenon. According to one version:

> Members of a hunting party joked about animals they had killed. This provoked the wrath of the **juri juri** demon that, in retaliation, killed them all, with the exception of one man who did not make fun of the animals. **Sacha palu**, a tree lizard, led the survivor to where the **juri juri** demons lived. They were holed up in the standing dead trunk (**pimus**) of an enormous **chunchu** tree (*Cedrelinga cateniformis*, Fabaceae-Mimosoideae). Staring down with their big eyes they looked just like night monkeys (**macuru**, *Aotus* sp.). The lizard then told the man to get people to gather hot peppers –three big basketfuls per person. There was a hole at the base of the trunk. The men cleared the tree base of debris and lit a fire. They then put the peppers in the flames and the acrid smoke caused the **juri juri** to fall out of the tree. They were killed in the flames. Then a beautiful female **juri juri**, that "looked like a white woman" ("**señurashina ricurin**") fell out. She asked for forgiveness and a Runa bachelor decided to marry her. As for the rest of the **juri juri**, the Runa pounded their charred remains into nothing. The man lived with his **juri juri** wife but there were problems. When she would bathe their babies in the river she would secretly eat their brains, sucking the blood out, "**tso tso**." Nevertheless, because of his privileged connection to the **juri juri** (who are game masters) the husband never failed to bring home meat from the hunt. One day, he asked his wife, who was pregnant again, to pick lice from his head. As they were seated outside and she was picking the lice he felt a burning sensation around his neck. He realized that his own blood that was flowing down his neck caused the warmth. He remarked to his wife, "you're eating me, stop." But he didn't get angry. Then he fell asleep and died. It began to thunder and the woman left and eventually gave birth to a boy. That is where the present **juri juri** population comes from. They are all over but they especially live in waterfalls. If the Runa had just killed this female **juri juri**, none would exist today.

There are several elements of this myth that I want to point out. The first is the idea of a stark antagonistic separation between two ontologically distinct kinds of beings: the **juri juri**, on the one hand, and the Runa, on the other. This is similar to the way in which the 1578 rebellion was viewed (apparently from both sides) as a battle between two distinct kinds of people, "*indios*"

(Indians) and "*cristianos españoles*" (Christian Spaniards) (Toribio de Ortiguera 1989 [1581-1585]: 361). The use of burning hot peppers was a widely distributed warfare technique in Amazonia (Métraux 1949: 394) and may have been used by the colonial era ancestors of the Runa as well (Oberem 1980: 263). Finally, both the Runa of the **juri juri** myth and the natives of the 1578 rebellion share as their goal the complete eradication of their enemies. In both cases they succeeded with the exception of a single "white" female.[80] The idea that the **juri juri** are in some ways equated with whites is bolstered by the fact that in this myth they are portrayed as game masters living in waterfalls. Such game masters are depicted as white in Ávila (see Chapter Six).

It would be misguided, to conclude from this analysis, that the Ávila Runa today experience some sort of essentialized and primordial difference between whites and Indians as distinct populations –winners and losers—that exist on either side of the contest of history. Although other myths portray a similar stark division between whites and natives through a variety of figurative permutations, it is not at all clear on which side the Runa consider themselves to be. For example, in a variant of the first part of the myth recounted above, told to me by Ventura, the demonic beings –not the Runa—are the ones that act like the 16$^{th}$ century ancestors of the Ávila Runa:

> A hunting party killed many woolly monkeys. A foolish and dumb hunter (**upa runa**) played with some of the dead animals. As punishment for this transgression a jaguar came and made the men sleepy as if drugged (**upayachina**) in order to eat them. Two men that escaped, however, were able to save themselves by climbing into the rafters of the house. It became dark as night even though it was daytime. The jaguar sent hordes of army ants (**tamia añangu**, *Eciton* spp.) so that no one could escape. Also the jaguar took **juri juri huasca** (*Selaginella exaltata*, Selaginellaceae, a fern-like vine forming dense monospecific tangles in primary forest that today are thought to be one of the places where **juri juri** demons reside) and made it sprout all over the trail, making it impassible. A night monkey then called like the **juri juri** demon and the dead and smoked game animals came back to life. Then the **puma** arrived. The two that escaped by hiding in the rafters were shamans. They were smoking cigars and blowing the smoke down to keep the **puma** away. They would hear how the jaguar would bite the head of each hunter

> with a "**trus**" and how the man would then let out a final "**eh**" before expiring. Then the **puma** called his wife in to eat. She came and ate, sucking up all the blood and eating all that belonged to the men. She ate the machete handles but wasn't able to eat the blades. She just licked them until they shined like mirrors. She then ate the leaves the men had slept on and the dirt underneath as far as a meter down. She ate anything that smelled like people. The resurrected monkeys and then the **juri juri** also started to eat the Runa. After all this carnage the man-eaters left and, as they were heard off in the distance roaring, it got light. The shamans that survived waited until there was a lot of light before descending. They saw that there weren't even any bones left and they returned home and told everyone what had happened.

The detail of this myth that I want to highlight is the jaguar's desire to eradicate all traces of the Runa. With the exception of the machete blades and the hidden shamans, it was able to do this. This is reminiscent of the 1578 uprising in which the Indians destroyed everything white –not only the people, but their homes and crops as well. They did, however, keep some loot (Toribio de Ortiguera 1989 [1581-1585]: 372), the most valuable of which was, undoubtedly, the steel tools. The myth differs from the historical account, however. The jaguar and **juri juri** demon –elsewhere equated with whites—are the ones that want to eradicate the Runa. In another flip-flop, the sole survivors of this campaign are natives, as opposed to the white survivors in the 1578 account.

A similar inversion can be seen in a myth documented by Wavrin (1927). Here, Runa enemies of the whites become jaguars who then begin to prey on the Runa and must therefore be killed. This example indicates just how malleable distinctions between whites and Indian can be. I paraphrase and summarize Wavrin's account:

> When the Spaniards arrived they enslaved the Indians and made them miserable. So the shamans got together to discuss what to do and resolved to hide out in the deep forests. To avoid being pursued by the Spaniards they transformed themselves into different kinds of jaguars. Runa hunters who went to the forest, however, began to be eaten by these jaguars and entire communities were being decimated. To put an end to this, the people took **aya huasca**, followed the appropri-

> ate taboos, and went out to hunt the jaguars. After many battles they were able to discover their subterranean lair. Upon entering it, they found many different jaguar pelts that they saw the shamans putting on. The Runa were then able to trap these were-jaguars in a cave in Galeras by stopping-up the entrance with a stone (Wavrin 1927: 328-329).

Relations of power between different kinds of beings are contextual and can shift; images of whiteness, like images of the jaguar, can be used to mark these.

### *Whiteness as Just Powerful*

Part of the ambivalence to whiteness stems from the idea that the Runa seem to attribute no specific moral quality to it. Whiteness as a condition can be either good or bad; it is, however, always powerful. I would like to develop this point by exploring depictions of priests. Of all the possible images of whites –the *hacendado*, the trader, the soldier, the conquistador, the anthropologist, the tourist, the bureaucrat– the priest is the figure that has become most deeply embedded in Upper Amazonian, and especially Runa, cosmology.

This can be understood by exploring the changing status of a spirit being that the Runa refer to as **supai**. As Harrison (1989: 49) has demonstrated, **supai** for Amazonian and Andean Quichua and Quechua speakers seems to have originally referred to powerful spirits with no specification as to their moral orientation. This remains the meaning of **supai** for many lowland Quichua speakers today such as those of the Arajuno (Harrison 1989: 49; Macdonald 1979: 158) and Puyo (Whitten 1976: 41) regions. In, Ávila, however, **supai** today refers specifically to a variety of demonic beings that share two important attributes: they are "man-eaters" (**runa micu**) and they consume people by drinking their blood (see Chapter Nine). This semantic restriction, visible in a variety of dictionaries, is due, as Harrison argues, to missionary influence (1989: 49).

It must have been a great consternation for the missionaries, then, to note that those classed as demon by Upper Amazonians, from very early periods, were represented as Europeans, especially priests.[81] As Maroni notes, the devil often appears as a, "**viracocha** [white] with a

white face, feet, and hands, the rest black, and with a gun over his shoulder (Maroni 1988 [1738]: 113; see also Wavrin 1927: 334). Later Maroni states that there is no nation that lacks a name for the devil: "And it is a pity that many of them use that same name for the Spaniards and that some even use it for the missionary that comes to instruct them" (Maroni 1988 [1738]: 172; cf. 1988 [1738]: 378).

As mentioned earlier, many **supai** demons in Ávila are described as having the physical appearance of robed priests. It would be incorrect, however, to conclude that the **supai** are equated with priests because whites are thought of as evil, and thereby construct a moralizing narrative of indigenous resistance in the face of outside threats. It is more accurate to see white priests as ambivalent figures that wield enormous power.

The ambivalent nature of priests is evident from the fact that in Ávila these are seen as the very people that can *best* do battle with the **supai**. It is said that before priests existed in the region there were many **supai** demons. As Ventura notes, "in the beginning times, they finished lots of people off by eating them" ("**callari tiempugunapi ashca runagunata micusa tucuchisca**"). The priests taught people to pray and held mass and, most importantly, they blessed the landscape. Due to these acts, these demons were driven away.

The Amazonian attribution of conditions to certain kinds of beings, in ways that are not necessarily tied to specific populations, races, or groups, and their immutable qualities, is not only limited to the distinctions made between the condition of whiteness and that of being Indian. This seems to have been misunderstood by Europeans. For example, missionaries reported populations –their geographic location is unspecified– who were known as "*los Murciélagos*" (the bats) because they scratch their war captives and suck the blood out of them while they are alive: "they suck them dry" ("*lo chupan de manera, q. quede limpio*") (Magnin 1988 [1740]: 480). In Ávila today no such ethnic group is known. Nevertheless, the bat (**tuta pishcu**)[82] is considered a **supai**. In mythic times it was known to eat humans, especially in the "famine" season in which little is in fruit (**mutsui uras**, roughly between September and November). One story tells of how

> the bats would kill a person every night, sucking out all the blood and leaving only

> the bones ("**tullu llucshinacaman**"). An old woman named **tuta pishcu aula** decided to do something about this. The bats would sleep in the eaves of her house, hanging by their feet under the thatch. When another old woman came to visit, the bats awoke and began to eat her. **Tuta pishcu aula** warned them, "watch out, I'll kill you by just farting" ("**ricungui supishalla huañuchisha**"). She farted (**sinchi supisca**) and all the bats died except for one that was pregnant. She was **rayu aula**.

Despite people's knowledge that most of the species of bats they encounter are frugivorous and harmless, bats are nevertheless not considered animals and are thought of uniformly as "demonic." Like jaguars and other demons they are, "among those that eat people" ("**runa micupura**"). The vampire bat (primarily *Desmodus rotundus*), of course, is the model for this image of the blood-sucking, demonic bat. In Ávila, it is known as **runa micu tuta pishcu** (man-eating bat). A generation ago, when the custom in Ávila was to keep large packs of hunting dogs, vampire bats were attracted to homes and were quite common. Their continuous blood drinking could debilitate small children. Today, Ávila has been blessed (**bendiciasca**) by priests and this, it is explained, is why vampire bats are now rare.

The point I wish to make is that there is a distinction between a kind of being that has a given attribute –say, whiteness or a predilection for blood—and specific populations of beings. Whereas the colonial sources attribute these features to geographically and historically specifiable peoples, this may be due to a misunderstanding of local categories. Blood-sucking rapaciousness, like political and technological power, may have it origins in a particular species of being. But these qualities are transferable. They do not necessarily inhere in a people or natural taxon. For example, in Ávila today, all bats are considered demonic and their blood-sucking propensity is projected onto all beings that are considered, **runa micupura**; **supai** demons wearing priestly robes, and jaguars alike, suck the blood of humans. Yet the Runa simultaneously distinguish several "biological" species of bats that do not ingest blood.[83]

***Priests***

If blood drinking has become a property of **supai** demons drawn originally from the vampire bat, what is it about priests that make them apt images for demons? Priests are ambivalent figures. They are generally credited with having pacified and civilized Amazonians and for exhibiting a paternalistic love for their Indian charges. Yet the Jesuits, especially, have also been associated with tremendous uses of force in their proselytization efforts. For example, they organized extensive military expeditions to pacify "infidels" (Maroni 1988 [1738]: 202), fired guns to purposely intimidate Indians (1988 [1738]: 278, 385), trained mission Indians European warfare tactics to be used against "infidels" and Portuguese alike (1988 [1738]: 373), and, as late as the end of the 19th century, they were involved in reprisal expeditions after an indigenous rebellion in Loreto (Jouanen 1977: 87). Furthermore, the Jesuits were enthusiastic believers in the virtues of corporal punishment in their treatment of Indians (1977: 94; Muratorio 1987: 99).

Owing to their pale facial features, whites are also associated with the dead and this too may have contributed to the idea that priests –being the most common representative of whites in Amazonia– came to symbolize demons. As already indicated, the 17th century Tupian Cocama mistook a Spaniard, who could speak their language, for an ancestor. In Ávila today, dreaming of the dead, augurs being visited by a white person. For example, upon my unannounced arrival to Delia's house after a long absence from Ávila, she commented matter-of-factly that she was not surprised to see me because she had dreamt the night before of her deceased father. Although she had dreamt of him as if he were still alive (**causashina**), the metaphoric equivalence is between the pallid nature of his corpse (**aya**) and the light features of whites (**yuraguna**).

Another indicator that priests are thought of in an ambivalent fashion—that is, as neither good nor evil—is that they are often portrayed as shamans. Indeed, like shamans their power resides in their abilities to mediate not only between men and God but also between Indians and whites. According to Rucuyaya Alonso, a Pano Runa (from near Tena) whose life history is documented by Blanca Muratorio

> When a person avoided going to mass, the Jesuits would mention his name, and when at the same time a candle dripped and his name was mentioned with tears in the eyes, then that person began to vomit and have diarrhea, and he would die right then and there. Because they did that, the old-timers would say that the Jesuits were like **yachaj** [shamans] (Muratorio 1987:127).

As Muratorio notes: "the Jesuits are remembered as having possessed certain powers similar to those of shamans, for example, the capacity to kill by magical means" (Muratorio 1987: 285-286). Beliefs about the shamanistic powers of the Jesuits seem to have been cultivated (or at least allowed to flourish unchecked) by the missionaries themselves. For example, Samuel Fritz, a 17th century Jesuit missionary, regarding the Yurimagua of the Amazon river islands, gleefully remarked: "The tremors and eclipses that we've had this year, they attribute them to me, saying in tears: 'What have we done to the Priest that has resulted in the Sun dying?'" (in Maroni 1988 [1738]: 339).

In Ávila today, one of the Josephine missionaries, a burly Italian, who has been working in the region for many decades, is thought of as a shaman. In part this is due to his reputation as a "**millai padri**," a mean priest, "just like a Jesuit" as people in Ávila say. For example, he has been known to hit Indians on occasion and can often be heard yelling at them. However, because of his thorough knowledge of the local people and their customs and his fluency in Quichua he is a quintessential mediator. In addition, he chain smokes cigarettes and this too is a marker of the shaman. Shamans acquire and cultivate power by smoking. Accordingly, like powerful shamans, he is described as **tahuacuyu** (with tobacco) and is even nicknamed **tahuacu padri** (the tobacco priest).

Another example of the shamanic status of this priest is his reported ambivalence toward **aya huasca**. An old Ávila Runa, regarded by many as a powerful shaman, recounted to me that during confession, this same priest asked him if he had recently ingested **aya huasca**. The shaman cleverly responded that he would only take a little when his stomach hurt too much. This man knew that even priests concede that **aya huasca** is a good remedy for stomach ache and in

this way he could deny drinking it for shamanic reasons without exactly lying and without being prohibited from drinking it in the future. Indeed, the priest responded by saying that it was acceptable to drink **aya huasca** as long is one did not drink too much of it. Discussing this conversation this Ávila shaman agreed with me that the missionary prohibitions on hallucinogens might stem from their fear that drinkers of **aya huasca**, by being able to have access to the divine through hallucinations, could usurp the priest's shamanic status as mediators between earth and heaven. To this, the shaman added that those who take **aya huasca**, "acquire knowledge like God" ("**Dyuscuinta yachanun**").

Because of his powers and aggressive personality, this priest is thought of not only as a shaman but also as a sorcerer; he is accused of committing acts of sorcery and is even described as **brujunaya** ("sort of like a sorcerer," "tending toward sorcery"). For example, a lay brother residing at the Josephine mission in Loreto told me of how a young Runa man went out hunting and was killed by a jaguar as he tried to shoot it. The father of this man later confided to this lay brother that his son had once urinated into the gas tank of the priest's Toyota pickup truck. Such trucks are also important symbols of white power and game masters are often described driving them (see Chapter Six). It followed, the father assumed, that the jaguar, a spirit helper of the sorcerer/priest, had been unleashed on his son as a reprisal.

Just because the Runa think of this priest as a sorcerer does not imply that he thinks of himself in this way. A Loreto colonist recounted to me that this priest had come to him one day quite distressed and hurt to confide in him that some Indians had accused him of sorcery. They blamed him for the death of one of their relatives.

Because they consider him an enemy sorcerer, some Runa shamans have even, it is said, attacked him. It is rumored that after this priest insulted one well-known Loreto shaman, the shaman, in turn, responded by muttering under his breath, "you eat chickens every day, now I will shoot you with a shamanic dart in the form of a chicken bone."[84] Poultry are a scarce resource in native villages and the Runa only eat chicken on special occasions. That this priest was thought

to eat chicken by himself daily is seen as a sign not only of his prodigal gluttony and avarice but also of his wealth and power. That the Loreto shaman chose to attack him, not with the traditional wooden shamanic darts (**pimus tullu**, for example) but with a dart imagined as a chicken bone, underscores his ability to turn this priestly power back on itself. In a further irony, it is reported that the priest, complaining of pains in his side, and—it is said—suspecting he had been attacked by a sorcerer, turned to this very same Loreto shaman for help, unaware that it he was the one that had attacked him. The Loreto shaman promptly sucked the darts from the priest's body, thereby curing him. That the priest can be imagined as consulting a shaman is another indicator of his shamanic status as mediator between Runa and white meaning-worlds.

It is important to note that this priest is not thought of as evil in Ávila, nor is he despised. Indeed, he is credited for having built a suspension bridge across the Suno river so that the Ávila Runa could get to Loreto more easily (it washed away in a flood in 1993 more or less). He has also formed strategic alliances with a powerful Ávila shaman and his residential kin group (**muntun**) in an attempt to relocate Ávila closer to Loreto and to build a proper chapel as well. This priest is feared and respected; he is not hated. In sum, he is thought of as a shaman—neither good nor evil, just powerful.

There is a profound irony regarding the image of priests in the Upper Amazon. Priests were successful at delimiting the range of the concept **supai** to a being that is only demonic. By doing so, however, they became the image upon which such a creature was modeled. Furthermore, although they were able to successfully redefine the term **supai**. They themselves took on a significance whose moral orientation is far from clear and deeply ambivalent. Priests today, then, have become in native eyes very similar to the original **supai** –powerful beings capable of both good and evil.

As white priests became **supai**, the Runa became Christian (see also Saignes 1999). In a further irony, although the Runa now embody those values, associated with whiteness, that the priests hoped to instill in them, they do not always extend these same qualities to the actual whites

they meet. Remarking upon a visit he made to the Runa village San José de Mote in the 1860s, the Spaniard Jiménez de la Espada notes:

> The women, despite my generosity in distributing crosses, medallions, and beads, when I jokingly told them that I would like to marry one of them, they replied that who would want that, since I was not Christian […] Since I was a devil, and nonetheless, they did not refuse the crosses and religious medallions from the hands of this person; it may well be true that the devil is that being from whom women receive that which they most enjoy (Jiménez de la Espada 1928: 473).

Indians, then, are dependent on whites and their accoutrements for the expression of their humanity while simultaneously negating the humanity and Christianity of particular whites.

Whites are no longer white; the Runa are.

**Conclusions**

In this chapter I have attempted to make sense of Oswaldo's confusion regarding the meaning of his dream. Oswaldo's mistake was one of vantagepoint; it was a problem of deciding from which *angle* to view his dream. Seen from the perspective of the policeman-as-subject, the dream was indeed terrifying, for such powerful white beings can mercilessly hunt the Runa. However, if Oswaldo had shifted perspectives to recognize that he –as hunter– was the subject of the dream and the peccary was the intended prey object, he would have recognized from the outset that this dream was, in fact, a positive omen.

Examining Oswaldo's dilemma has provided an opportunity to get a sense of how the Runa experience power. Power is certainly associated with whites. The Spanish conquest and centuries of colonization have been devastatingly brutal to native peoples; any society with a modicum of contact with these forces must come to term with this fact.

A western racialized view of ontology might posit that whiteness is biologically associated with a race of peoples –for example, with Europeans. If one makes this assumption then there are only two choices for native peoples: submission or resistance. On this view, there are few

options through which an Indian could become empowered through contact with whiteness, for this attribute is inherent to a genetically determined kind of body. One such strategy might be mimesis –the parroting of white ways. But a simple view of mimesis reproduces this western ontology in its assumption that an essence (say a racial one) can only be tapped by copying it. This problem is compounded because it presupposes that the "natives" employ the same racialized view of ontology held by westerners when they copy.

Amazonian appropriations of whiteness, by contrast, conform to a radically different view of ontology. Whiteness is associated with a certain kind of people in the same way that jaguar hides and canines are associated with a kind of predatory animal. Yet, like the power of the jaguar, whiteness can also be appropriated. Whiteness is a kind of clothing. It can be put on, taken off, and even divested from others. This is why wearing it is not mimetic.

The Runa are survivors; they are a vibrant, thriving people. As such, they are powerful and this explains why they are white. Whiteness is a historically situated index of a condition of power. It is a kind of language of power and it is one that can be spoken by the adepts that manage to learn it. In many contexts, such as that described by Jiménez de la Espada, the Runa see themselves as "true people" (identified by their possession of the accoutrements and attributes of whiteness) as opposed to the Europeans that visit them who have become demonic. In such contexts –for a moment at least– the power dynamics change; the Runa become white and the Europeans lose this attribute.

Understanding whiteness is central to making sense of Runa ecological cosmologies. It explains why they game masters are white, and, more importantly, what white, in such context means. In this chapter I have indicated how the power of whiteness is perspectival. In Chapter Nine, the final chapter, I will turn to specific strategies of how it can be harnessed by the Runa to access the goods of the forest.

# Chapter Eight
# Historical Process:
# Co-construction, Maintenance, and Change in Ecological Cosmology

## Introduction

In this chapter I am interested in understanding the generative processes by which spaces such as the game master world came about. I am also interested in understanding how they are maintained ideologically as well as the relationship they have –as reflections of history—to the fluidity of historical process. In the previous two chapters I have discussed how Ávila ecological cosmology has responded to greater historical processes. In this chapter, by contrast, my aim is to get a glimpse of the process of history-making itself. I have already implied that such cosmologies are fluid. But what might a moment of change look like? And how, despite these changes, does such a cosmology nonetheless maintain a modicum of stability?

## Co-construction

I am particularly interested in getting glimpses of the complicated process by which ecological cosmologies have emerged in a charged context of dialogue (Mannheim and Tedlock 1995) involving locals and outsiders. Michael Taussig has been very influential in revealing one aspect of this process. He has shown how a certain mode of colonial imagination arose and was used to justify the brutal treatment of Amazonians, especially during the Rubber Boom:

> So it was with the stories circulating during the Putumayo Rubber Boom in which the colonists and rubber company employees not only feared but themselves created through narration fearful and confusing images of savagery, images that bound colonial society together through the epistemic murk of the space of death. The terror and the torture they devised mirrored the horror of the savagery they both feared and fictionalized […] In the colonial mode of production of reality, as in the Putumayo, such mimesis occurs by a colonial mirroring of otherness that reflects back onto the colonists the barbarity of their own social relations, but as

> imputed to the savagery they yearn to colonize (Taussig 1987: 133-134).

The colonial construction of savagery that Taussig portrays is clearly one part of the picture. Yet he does not go the other direction to trace such constructions back into local societies and specific moments of their dialogues with outsiders.

By contrast, I want to examine this process of co-construction through some of the writings of Alfred Simson, a 19th century British mariner and explorer that published several articles in anthropological journals. Taussig quotes Simson extensively, portraying him as a complicit (1987: 62-63), if unwitting, participant in the colonial construction of the "savage episteme" (1987: 91). A closer reading of Simson, however—one with an ear to the muffled indigenous voices audible in his accounts—points to a more complicated picture.

Admittedly, Simson is deeply caught up in his role of authority over the natives and, despite he prescient ethnographic observations, he seems to be primarily concerned with a variety of questions that can only be described as colonial (e.g., what makes a "savage" savage, what makes one people obedient and another untamable, which groups are dangerous, which are likely to provide able workers). Nevertheless, he also has a keen ear to the rhythms of local life and an uncanny imagination that allows him to meet the Other halfway, so to speak. Reading him attuned to these sensibilities can provide an understanding of the psychological mechanisms of empathy and translation that have led to the emergence of images that are meaningful (albeit in different ways) to locals and outsiders alike.

Regarding the local appropriation of foreign images, Peter Gow has explored how Amazonians fashion cosmologies out of encounters with outsiders:

> Starting from the autochthonous discourses of difference at their disposal, such peoples used all their contacts with missionaries, travelers, and even anthropologists to fashion an image of colonial history as an aspect of their autopoesis (1993: 343).

Gow is concerned primarily with the other side of the equation –how natives receive discourses wholesale and, by a process he aptly terms "audacious bricolage," how they then chop them up and re-appropriate them. He convincingly shows how locals appropriate historical elements that are received from the outside and how they make these central to their own identity. I have shown in the previous chapter as well as elsewhere (Kohn, in press) how this is applicable to Ecuadorian Quichua-speakers as well.

But such a process of appropriation is also dialogical. It is not just a question of selective reception. A reading of Simson can provide some insight into the dialogical quality of this interaction. Regarding the impressions of some Záparo guides he contracted in the Upper Napo for a journey to the Marañon, Simson observes:

> Upon reaching Iquitos on the Marañon, I was anxious to observe their impressions upon their seeing the wonders […] Fine houses, large steamers, iron works &c., apparently hardly attracted their attention, and caused them no astonishment, but what called forth all the interest they were capable of showing were the cows and horses. They, who thought that every animal was familiar to them, had never dreamt of such as these! And when they saw me suddenly approach sitting astride a huge animal, far taller and more formidable-looking than the tapir, who was prancing and plunging, they escaped into the house and shut the door (Simson 1878: 509).

This explorer is quite conscious of the ways in which his power is indexed to the "formidable-looking" horse. This stems from his interest in impressing upon the natives the power of modernity and he is quite curious—ethnographically so—about their reactions. More important for the discussion at hand, however, is the way in which he projects "in the mind" of the native the equivalence between the horse and the tapir. The tapir is the largest native terrestrial mammal in South America. Of the native fauna, it is the only extant member of the order Perissodactyla (the odd-toed ungulates) which also includes the Old World horse.

How could Simson have predicted that today in Ávila people think of the tapir as the "horse" of the game master and that this lord of the forest is even imagined to ride upon it?[85] This

example is an instance of the kinds of co-constructions that I am attempting to capture. Within the charged situations of contact and communication, equivalencies, such as that between the tapir and the horse, naturalize themselves. This points to a (partially) shared semiotic environment; both Simson and the natives agree on some ground rules regarding metaphoric comparisons between domesticated and wild animals that can help predict why certain paired members of each set will be equated. It also points to Simson's (partially successful) attempts to "think like" a native.

The charged dialogue in which Simson participated, however, had a far more sinister side; this in many ways is what gave his words and deeds so much power. Regarding his visit to the Piojé on the Putumayo, Simson writes:

> Upon my offering to embellish a Piojé with the brush, and the red paint which they always carry with them, he at once acquiesced, and submitted most seriously to my roughly sketching a sort of death's head on each cheek and a laughing face on his nose (1879: 222).

Although Simson means to be playful, the inscription of this ominous symbol was received "most seriously." As Simson himself notes, the man, "did not wash it off for days" (1879: 222). Simson could afford to remain unconscious of the context in which such play was carried out; the Indians, by contrast, could not. There is always an underlying political context in which such activities are carried out. For example, one night in the western Tukanoan Piojé village of Yasotoaró on the Putumayo, Simson and his colleagues, woken by the noise of a drinking party, went to the house of a Piojé named "Simon" the –"most intelligent, hardworking, and generally most enlightened of the village" (1879: 218)– in order to quiet the revelers:

> The Indians in Simon's house were in such a state of excitement and making such a deafening noise that they would not and could not listen to the "*corregidor*" [magistrate] who was foremost amongst us, but Simon, when he saw him, began at once to resent the interference by saying, in the most impressive language he could use: "*Nosotros blanco no queriendo, ese blanco mucho no bueno tiene*" (We

> do not want white men; this white man is very much not good) and at the same he came forward as if to make an attack. The "*corregidor*" at once gave him a blow with his fist full on one eye which knocked him down. In a moment all was changed, and the Indians were cowed into their usually taciturn timidity. Most others would not have cared much afterwards for having been knocked down, but poor Simon felt the degradation more deeply than I have ever seen in one of his race. His whole spirit appeared broken from that moment and the blow he received had entered his soul. This unusual sensitiveness doubtless arose in part in that he had had a good master for some time past, by whom he had been treated with great consideration as had he also been during his service under me (Simson 1879: 218-219, Spanish italicized phrase and translation in the original).

The power of the *corregidor* is underscored by an ever present and tangible threat; the Indians easily succumbed to devastating infectious diseases that were recognized by locals as originating with whites:

> On my descent of the river [Putumayo] the Consacuntí Indians accused me of bringing catarrh to them with my party when passing their place on the upward journey. I denied having done so as none of us were suffering from cold. Two months afterwards I heard from a friend who had visited the same village that nearly all its inhabitants had died from the effects of the colds they had and which they sometimes appear to contract by mere contact with white men (Simson 1879: 217).

Whether the annihilation of these villagers was indeed Simson's fault is, in some sense, immaterial. With not so much as a sneeze, he *could* have decimated them. This potential for destruction is the context in which Simson's act of face painting was received.

However, the awesome power wielded by "the whiteman" (as Simson would say) is not enough to explain either why specific kinds of ideas emerged or how locals received them. Indeed, even in these kinds of charged colonial situations, meanings still emerge dialogically.

Simson also spent a great deal of time among the Quichua-speaking Runa. Although Ávila was much too far inland from navigable rivers to attract his attention, he did visit Runa

communities on the Napo and Bobonaza rivers. In this latter region, one particular Runa, by the name of Marcelino, made a very strong impression on Simson. According to Simson, Marcelino was, "of the many Indians I have seen of his class, the most intelligent and desirous of acquiring knowledge, and not out of mere curiosity like his brethren:"

> To his repeated and urgent questions, I explained to him how far my country was; how on foot and in canoe –the only methods of progression known to him—it would take him ten moons to reach it, were this indeed at all possible; how many of its villages contained each more men than all the tribes he knew put together; how knives, axes, beads, *lieuzo* [*lienzo,* coarse cotton trade cloth], guns, and all such things were to be had there in the greatest profusion. And I further explained to him that there were no jaguars or snakes to destroy one's dogs and children, but only animals useful to man, and that served him for food. He must have thought it a paradise (1880: 392-393).

In his attempt to translate Britain into a vocabulary he thinks Marcelino can understand, Simson unwittingly recreated the world of the game masters. He does so by matching up, through metaphoric correspondence, the urban, opulent, and domestic, on the one hand, with the sylvan, impoverished, and wild, on the other. In the "paradise" he describes, instead of scattered villages, there are large cities. In place of poverty, goods are found in the "greatest profusion." And, instead of wild beasts, only domesticated edible ones are found. Simson's "translation" is attuned very specifically to Marcelino's ideas of the outside world. It does not matter that it was not fashionable, at the time of his writing, for the inhabitants of his country to sport beads. And *lienzo*, clearly, was not a desired fabric in Britain at that time either.

Not only does Simson create a utopia but he also hints to Marcelino how it might be accessed. Indeed, reading Simson's account of how Marcelino reacted to this conversation, we can get a glimpse of this:

> The seriousness and earnestness with which he listened to my explanations interested me much, and we became great friends. I delighted him exceedingly by giv-

> ing him one of my pipes to smoke, and he, to make the best of it, completely swallowed all the smoke he could draw in huge volumes. The next day he told me he had been so giddy from its effects that he had felt very uncomfortable and could hardly stand, which did not surprise me much in one who had never before smoked strong tobacco, and from a short pipe; nevertheless, he was nothing loth to have another fill, and took care not to waste the good things that were laid before him by again swallowing all the smoke, regardless of the discomfort he knew it would afterwards cause him. I reminded him of this, but he merely said, "he liked smoking the pipe" (1880: 393).

It is not entirely clear that Simson fully understood what sort of an interaction he was participating in. He was right, however, in stating that Marcelino was "making the best of it"; the "knowledge" that Marcelino was intent on acquiring was clearly of the shamanistic sort. As Simpson notes, this old man was "desirous of acquiring knowledge" and not just out of "mere curiosity." Although Simson may not have fully understood the interaction, he clearly understood his role in it; he was from a utopian land of opulence and had privileged access to its goods. The power that Simson represented was what Marcelino wanted and his enthusiasm for ingesting Simson's "strong tobacco" was part of a strategy to get it. As Simson makes clear –but does not necessarily comprehend—smoking for Marcelino was not a recreational activity. Rather, it was an instrumental act. That tobacco was seen by Marcelino as a vehicle for shamanic empowerment is suggested by the fact that for the Runa the transfer of such power from shaman to novice is mediated in large part through the ingestion of tobacco (Whitten 1976: 147).[86] In Ávila today, "strong tobacco" such as properly cured locally grown varieties and some national brands of unfiltered cigarettes found primarily in rural areas are referred to as **ali** (good) or **sinchi** (strong). Shamans prefer these, for their strong flavor is equated with their transformative power. By contrast, improperly cured tobacco, some filtered cigarettes, and other lighter tobaccos, are described by such people as **upa**. This literally means dumb or flavorless; in a shamanic context, however, it more accurately means unproductive or inert.

**Civil Savages**

How is it that outsiders came to translate certain notions of civilization in terms that are almost identical to the images of society that the Runa today project onto the forest in the form of the game master realm? A further example of this process is evident in a sermon given to the Loreto Runa by the Jesuit Father Pozzi towards the end of the 19th century. This priest also visited Ávila in 1873 and it is likely that he repeated some of these ideas there as well:

> The *Runas* of the Macas region are wiser (*más sabidos*) than you all are. They all live in the village and they help each other to clear their *chacras* [garden plots]; they go around well dressed; they have their cows, pigs, turkeys, and chickens in great abundance. So much so that at daybreak it gives pleasure to hear their sounds as the roosters call *kikirikí*. Since you are settled throughout the forest (*diseminados por los bosques*) you've scared away the game, and there isn't a bird to be found; it's the exact opposite in Macas. You guys go around starving because you're stupid (*por ser bobos*), why don't you live with your Fathers the Missionaries? Do we ban *chicha* [manioc beer] or *aguardiente*? What we prohibit is drunkenness (*la borrachera*); but we'll even give you a shot (*un traguito*) every now and then. Do we punish you for no reason; do we take advantage of you? You see that we don't. We can't take with us the church you're building. It will remain here for you. It just gives us pity to see you living and dying like dogs (quoted in Jouanen 1977: 90).

By the "*Runas*" of Macas, Pozzi is referring to the Jivaroan Shuar living in the Macas region of the southern Ecuadorian Oriente. This is quite ironic in so far as the term Runa is generally used to refer to the Christian and civilized Quichua-speaking Indians, whereas the Shuar at this time were still considered infidels and would not come into peaceful sustained contact with outsiders –that is they would not "become Runa"– until much later. Pozzi was writing at a time when there was a shift in missionary policy. It was decided that the Jesuits abandon their missions among the infidel groups like the Shuar and relocate to work with the "semi-Christianized" Runa. This was a harsh blow to the missionaries intent on the heroic proselytization of untouched heathens. As Porras remarks: "It is certain that the apostles would prefer a thousand times more to be faced

with pagans in the strict sense of the word than with pseudo-Christians" (Porras 1955: 154). By idealizing the qualities of the Shuar, Pozzi is clearly waxing nostalgic about a group to which he could no longer attend.

The irony in Pozzi's sermon goes beyond his labeling of the Shuar as Runa. Indeed, he treats the Shuar as a kind of "civil savage." They live in a "town" and cooperate among neighbors. They are diligent workers and are well dressed (the Shuar at this time still wore traditional locally hand woven clothing). They have an abundance of domestic animals and therefore need not rely on hunting. The natives of Loreto (the "real" Runa), by contrast are "dogs." Pozzi's logic seems to be that like dogs, the Quichua Runa have become the domesticated servants of their white masters and through this process they have lost the ability to be truly civilized in the way that only an autonomous tribe living deep in the jungle can (see Chapter Five).

Others have also idealized the virtues of the Shuar vis-à-vis the missionized, and therefore in their eyes degraded, Runa. According to Simson, the Quichua-speaking Runa of Canelos—in large part Christianized descendents of the Shuar living to the south—are lazy and given to drink. Whereas those Shuar that have remained unconquered are hard workers (Simson 1880: 390). In this regard Sinclair and Wasson echo Simson as well as Pozzi:

> The Jíbaros south of the Pastaza hold no allegiance to white masters and are in many ways superior to the Quichuas. They have strong, clean bodies and intelligent faces. They go armed with deadly blowguns and long lances bearing iron heads. The men weave a good grade of cloth made from homespun cotton. They build strong houses of hard black palm, for each family is a unit and the house is a fort as well as a home (Sinclair and Wasson 1923: 210).

The intent of these writers is to denigrate the Runa by showing how the savages are more civilized than they are. But it is also curious that in the images they conjure of an idyllic Shuar society and the markers they use to define it, one can see many elements of the Ávila game master realm. This is evident in the description of an ideal community of infidels, living in tight nucle-

ated villages or the tidy "unit" of the house fortress, located in a jungle region but subsisting on domesticated animals.

Pozzi, moreover, wants the Loreto Runa to be at the same time like unconquered heathen tribes, in their structured norms and "civil savagery," and like good Christians who live with their Missionary Fathers. These two attributes are combined precisely in the game master realm. As I have shown in Chapters Six and Seven, a white **curaga** is not an oxymoron for the Runa; nor, it seems, is it a contradiction in terms for missionaries.

**Structural Conjunctures**

As Gow notes, "the literary representations of Western Amazonia, with the intense imagery they have generated, cannot simply be dismissed by anthropologists as false, but must be recognized as a central part of the colonial history of the area" (Gow 1993: 327-328). Such images need to be understood because they have been adopted locally. But what is this process of adoption? Did the likes of Simson, Pozzi, and Sinclair and Wasson produce these images on their own? What are the subtle local clues, inhering in the landscape, as well as in the gestures and deeds of the people, that led them to these ideas? Why is it that locals and outsiders, coming from either side of this colonial problem, as it were, nevertheless arrive at a sort of middle ground (White 1991)? This particular middle ground is not a bumbling protocol through which crude interactions are carried out, but a complex set of meanings that everyone seems to see in the landscape even if no one is quite sure how it emerged. It is in this sharing that cultural construction is dialogical.

Nevertheless, dialogue—that is, the interchange of words and ideas—cannot, by itself, account for the emergence of cosmologies such as the game master realm with all its peculiar features. Economic and political structural features that have come to settle in the landscape also play a role in creating this kind of cosmology. This is quite evident in the work of Peter Gow. Gow writes of how the Piro of the Bajo Urubamba are involved in a system of debt peonage by

means of which, "native people transform their work on local resources such as tropical hard-woods, into such imported manufactured goods as clothing and salt" (Gow 1993: 332). It is through this debt peonage that

> the forest as an object of work, is transformed into the *cosas finas*, the "fine things," the production of which engages modes of knowledge unavailable on the Bajo Urubamba. Such modes of knowledge are embodied in native people's image of *la fábrica* "the factory," a mysterious site of material transformation located in cities and *afuera* "outside" that is, outside of Amazonia (1993: 332).

Native peoples from this region go into the forest to get the primary products that will be exchanged for factory made goods. However,

> because the fine things encode awe-inspiring forms of material transmutation, native people fear direct contact with the outside, and rely on their *patrones*, the local white bosses, to mediate the processes through the complex debt-and-credit transactions of *habilitación* (1993: 332).

The process that Gow discusses does not occur in Ávila. The Ávila Runa do not seem to be afraid of urban technology, although, they may well find it awesome. Furthermore, they do not view the forest in such stark economic terms –in large part, because they are much less integrated into a market economy, it seems. However, both Ávila and the Urubamba region share certain fundamental economic and political structural features. One such feature is the importance of outside whites whose power resides in a disproportionate access to material goods. Another is that native well-being, in some way or another, depends on access to the goods of the forest. Furthermore, in Ávila as well as on the lower Urubamba, these two factors are connected. In the Urubamba case, raw materials that are exploited by locals are, in turn, transformed into manufactured goods via bosses who then transfer these back to locals. In the Ávila case, the mediation of powerful outsiders in the conversion of forest resources to local wealth is more ideological in nature; game

animals are equated with the riches of the city and white game masters must be placated in order to access these (see Chapter Nine). In both cases, although in different ways, urban utopias, and the whites associated with them, come to reside in, and become intimately connected with, the forests in which natives seek sustenance. The Runa cosmological system would not exist in the way that it does in Ávila without the existence of the general kinds of structural relationships between locals and outsiders that Gow discusses.

The environment, and how it is exploited, is an additional kind of structural feature that shapes cosmology. These structures interpenetrate with political and economic ones. For example, there is an "evident" affinity –grounded in phylogenetic proximity– between the tapir and the horse that encourages these animals to be linked metaphorically. Nevertheless, that this kind of relationship becomes important in the game master cosmology also has to do with the horse's association with a historically-specific kind of political power –whites ride them– and local ideas of how such political structures are projected onto the landscape.

**Maintenance**

If construction is an important part of historical process, so is upkeep. I now want to turn to a discussion of how Runa ecological cosmologies are maintained ideologically. Runa ecological cosmology, as I have shown, is not unchanging but rather a product of specific historical circumstances and a series of dialogues with other peoples. At least formally, however, Runa ecological cosmology is very similar to the more traditional Achuar system in that in both a vision of society is projected onto nature. Descola has argued that this "animistic" way of understanding nature tends to lead to a stable unchanging way of life because how the Achuar represent nature, as well as their relation to it, is modeled after a specific form of social organization. Any change in this organization would therefore necessitate a major realignment of this conceptual model and a concomitant change in the ways in which the Achuar actually manipulate and adapt to nature. This is why, Descola argues, productive systems like that of the Achuar "perpetuate themselves

in an identical fashion during great periods of time" (1988: 439).

In light of Descola's comments, the Runa case is very interesting, for these people have experienced tremendous socio-economic and political change and this is reflected in their cosmology. Yet, in formal terms, the animistic and perspectival quality of this cosmology has changed very little. Descola's insistence on the continuing relevance of Lévi-Strauss' image of "cold societies" captures something. It is not enough to say that the Runa have history, for they have a particular way of dealing with history that in some ways is "cold" (see Hill 1988, Gow 2001). The Runa case posits the following question: How can a cosmology simultaneously create the "illusion of quiddity" (Geertz 1995) and accurately reflect a people's position in a changing world?

This seems to be accomplished in Ávila by a certain way of projecting society onto the forest. Such projections are not literal mirror images of contemporary socio-political reality. Rather, the images, while accurately reflecting important current relations, are often drawn from the past. There seems to be a historical time lag between such images and present reality. For example, although demons in Ávila are described as wearing priestly habits, modern missionaries in the region no longer wear these. In addition, the opulent *haciendas* on the Napo, which serve so prominently as models for the game master realm, were in a state of ruin by the mid-1920s (Gianotti 1997: 119). There are still plenty of powerful landowners around Ávila but the majority of outsiders (**ahuallacta**) in the region are now poor colonists who have no place in the game master realm. Clearly, Ávila ecological cosmology would be seen as having changed tremendously if it could be compared to its pre-Contact equivalent. Yet this cosmology also appears to be cloaked in a kind of unchanging essentialism. How is it that such stasis is maintained and why is this "illusion of quiddity" important in the first place?

A tension exists in Ávila between a stated ideology of fixity and a world in flux (see also Hugh-Jones 1989). This, for example, is evident in plant nomenclature. To my queries about the etymology of a particular plant name, people would usually respond with something to the effect

that, "that's what the old-timers (**rucuguna**) would call it." Furthermore, many people additionally state that all plants were named originally by God (**Yaya Dyus**). Naming is ahistorical; people do not name plants and these designations do not change. Etymology, then, is not a locally relevant concern.

Furthermore, the fact that many plants are unnamed does not prompt people to come up with names for them. Although younger people may admit ignorance to the names of some taxa, older people will feel that they know all plants that are named. Confronted with a tree for which they do not have a name, they might say, as Juanicu did, "it's just a plain-old tree" ("**yanga yurami**"). There is a certain ideology of fixity. Names are thought to be attached permanently to taxa and this relationship is unchanging.

Yet other elements of plant naming seem to suggest a much more malleable system. For example, leaves or bark slash of an unknown plant are often tasted. If they are deemed bitter (**jaya**) it is supposed that the plant in question "might be suitable as a remedy" (**jambi canga**); bitterness, according to local understandings, is equated with medical potency. On a plant-collecting trip in premontane forest, Ascencio and I came across a small midcanopy tree of the genus *Coussarea* (Rubiaceae). Ascencio at first remarked that he did not know the name. Then he smelled the bark and commented "**jambi rurana**" ("[good] for making medicine"). Ascencio felt it could be used to make vapor baths to treat aches and pains (**aicha nanai**) and began calling it **juya yura** (the vapor bath tree).

Even though they are not thought of as such, the names of many organisms are tied to historical moments, events, and eras. For example, the praying mantids are often referred to with the name **huangana caya** (callers of the white-lipped peccary) because the direction in which they point their raised fore legs is thought to indicate the location of white-lipped peccary. It does not seem to matter to the Ávila Runa that a herd of white-lipped peccary has not passed through the region for at least twenty years.

Other names can be tied to specific historical events. For example, the **aya martillu**

(hammer of the dead) is a kind of nocturnally active cricket that occasionally finds its way into houses where it rubs its forewings to produce a series of chirps that the Runa imitate as "**tin tin tin**." The presence of this cricket is an omen that a relative will die, for its call resembles the sharp metallic ring of a hammer striking a nail that is firmly planted in one of the hardwood planks used to make a coffin. This cricket, with its name and attributes, is thought to be an unchanging part of a stable ecosemiotic universe (see Chapter Four). Yet its name and meaning are derived from a specific historical moment. The use of hammers and nails has only been adopted in the last generation or so. Before this time, the dead were buried in a sheet of bamboo (**huama**, *Guadua* sp., Poaceae)[87] slats that was rolled up around the body.

Other names can be traced to specific historical events. This is evident with several organisms that are named after Catholic feasts. For example, of the folk genus **cara caspi** (*Guatteria*, Annonaceae), whose fruits are primarily eaten by large game birds, one species, **navidad cara caspi**, is distinguished from its congenerics because it fruits around Christmas (*Navidad*). Similarly, **navidad pacai** is a species of *Inga* (Fabaceae-Mimosoideaee) that fruits in December. Another *Inga* species fruits during Easter (*Pascua*) and is therefore referred to as **pascua pacai**. The fruits of *Gustavia macarenensis* (Lecythidaceae), coveted for their edible oily flesh, ripen around Easter (*Pascua*). This tree is therefore known as **pasu** (Quichua for *Pascua*). Because the white-necked thrush lays eggs during Easter its name, **pasu pishcu** also refers to this feast. Of the folk genus of understory trees known as **anduchi caspi** (primarily *Miconia* spp., Melastomataceae), whose berries are eaten by a variety of birds, **sajuan anduchi caspi** (Melastomataceae) is known as such because it flowers and fruits around the time of St. John's day (*San Juan*, June 24).

I have been unable to document from written historical sources the process by which taxa acquired Catholic feast -related names. It is, however, likely that missionaries renamed these plants in an attempt to align local yearly calendars—based on the fruiting of important resources, fish migrations, and the nuptial flights of leafcutter ants—with the festival cycle of the Catholic

calendar they wished to impose. By linking local phenology with important Catholic festivals, Catholicism becomes naturalized and, more practically, the Runa could be reminded—in the absence of a resident priest—when they should reconvene to the community center for the festivals.

In the past decades, however, Catholicism has moved away from processional celebration and feast to focus more on individual worship. Accordingly, whereas, Catholic ritual in Ávila was heavily focused around the fiestas as late as the 1970s (see Hudelson 1987), this system has now disappeared completely.

Although the plants mentioned above retain their association with Christian holidays, some, with similarly derived names, are no longer remembered to be associated with Catholicism. For example, **corpus** is an understory shrub of the genus *Palicourea* (Rubiaceae) whose very showy inflorescences bloom between May and June, approximately. It is replaced ecologically, according to local thinking, by similar flowery shrubs in different regions: **urai curpus** (lowland **curpus**, *Ruellia colorata*, Acanthaceae) at lower elevations east of Ávila and **urcu curpus** (mountain **curpus**, *Coussarea* sp., Rubiaceae) in the premontane forests to the west. The names of these are derived from Corpus Christi, a movable Catholic feast held between May and June. Many people in Ávila know this plant but do not remember that its name once referred to a Catholic feast that is no longer celebrated.

Other taxa refer to specific, datable events. For example, in Ávila I collected a specimen of *Tetrathylacium macrophyllum* (Flacourtiaceae). This is a tree with a cascading panicle of translucent dark red fruits whose Quichua name, **hualca muyu**, means, appropriately, bead necklace. Rather than resembling the opaque glass necklace beads of Bohemian origin that have been a mainstay of Amazonian trade for the past century, these fruits bear an uncanny resemblance to an earlier dark red and translucent Venetian trade bead that circulated in Ecuador around the time of the presidency of Ignacio Veintemilla (1878-1882) and was therefore called *veintemilla*. The passage of a trade item through a local economy can be marked by a plant name even after peo-

ple have long forgotten it.

One kind of grasshopper (probably *Eumastax* sp., see Hogue [1993]: 163 and pl. 1c) has a body that is streaked with iridescent stripes of green, blue, and yellow. It is referred to as **soldadu jiji** (soldier grasshopper).[88] The long hind wings tucked back and the bright colors resemble the tails and epaulettes, respectively, of the uniform of 19th century soldiers and not the camouflage fatigues favored by Ecuador's armed forces today. Although the soldiers seen today in the Amazon all wear fatigues, the guards that stand at attention in front of the presidential palace in Quito still wear this traditional uniform. Forty years ago, when the Ávila Runa still traveled to Quito, and the city was small enough that life was organized around the *Plaza Grande* and its presidential palace, these soldiers and their uniforms would have made quite an impression.

How do such conflicting ideas about organisms exist side by side? What is the process by which history (things that happened in the past) becomes isolated from historicity (the feeling of change)? Local attitudes to plant names reveal an attempt to deny historicity. In other contexts, however, the idea that, when compared to the Ávila of today, things were different in the past, and are still different in other regions, is used to maintain cosmological stability. This can best be illustrated by examining the concept of **runa puma**—the were-jaguar (see Chapter Five). Powerful Ávila adults, primarily men but also women, are thought to be **pumayu** (with the jaguar). From a very early age they cultivate a jaguar spirit. This is accomplished in part by ingesting a macerated bark decoction made from **puma caspi** (*Eschweilera* sp., Lecythidaceae), a massive straight-trunked canopy emergent tree found in the foothill forests west of Ávila. This process is also accomplished by receiving administrations of hot peppers to the tear duct using the tip of a jaguar canine. The **runa puma** inside a young person is said to be like a cat. It is very small and not particularly powerful. As the person ages, however, it grows larger and stronger. Having a **puma** spirit is associated with a certain level of maturity. Men that have acquired **sagra tullu** (the shamanic darts necessary to heal and harm), drink **aya huasca**, and have married and are raising children, are considered to be **pumayu**. As one man explained, "the soul

matures and when the soul matures [one] becomes a jaguar" ("**alma rucuyan, alma rucuyapi puma tucun**"). Such men are said to have a certain quiet power: they are calm with visitors, people do not easily intimidate them, and they can comfortably joke and converse with people. When a person has such a presence, "he has a **puma**, he becomes a good man, he is not angered, he lives good-heartedly" ("**puma charin, ali runa tucun, mana piñarin, ali shungu causan**").[89]

Not only is the acquisition of a jaguar spirit central to Ávila Runa notions of personhood but their purported ability to do so at any moment, and at will, has bestowed them with a mantel of fame, fear, and respect by the Runa of many of the communities of the Upper Napo. For example, when I was doing field work at another Runa village on the upper Napo near Ahuano in the late 1980's, a common vision that shamans had under the influence of **aya huasca** was of Ávila shamans, transformed into enormous white jaguars, prowling in the forests near their community (Kohn 1992). Indeed, many Runa from the Archidona region are terrified of the Ávila Runa and will not venture to their community. They fear that, once in Ávila, they will be invited to a drinking party and when they go outside to urinate, an Ávila man will suddenly transform himself into a jaguar, and eat them. This reputation, which I had initially interpreted as evidence of a proud and defiant community, was one factor that, admittedly, attracted me to Ávila.

When I got to Ávila, however, I soon realized that these fears were unfounded. Ávila people do not become jaguars at will. A person's jaguar spirit is thought to inhabit the body of a forest jaguar only upon death or during serious illness. For example, an elderly moribund might suddenly become revitalized because his or her jaguar spirit has gone into the forest and eaten a peccary.

When I ask the Ávila Runa about their rumored ability to transform themselves at will into jaguars, they explain that today only members of the "savage" tribes such as the Auca (Huaorani) and Cushma (Cofán and western Tukanoan Siona and Secoya) can do this. However, they add, in the days of the Ávila old-timers, people were readily able to become jaguars at will. Legend has it that a powerful shaman at drinking party would suddenly remark, ("it seems like [it] has

bitten") ("**canishcashina yachin**") in reference to the sensation provoked by his **puma** spirit that he had sent out to the forest to hunt while he was inside drinking beer.

People in Ávila use the idea that the past is different from the present, and its logical extension, that Aucas in far away places share certain features with distant Runa ancestors, to couch certain cosmological claims. Just like the Archidona Runa think of the Ávila Runa—who have a more traditional lifeway and live further from roads and towns—as being able to become jaguars at will, so too the Ávila Runa attribute this same ability to the distant "savages." The ability to project some of the more salient (and falsifiable) attributes of the jaguar spirit to a distant time and place contributes to the maintenance of a system of thought that in Ávila is central, not only to how the Runa understand themselves but also to how they understand their relation to the forest and to the people that live beyond it as well.

**Conclusion**

Keith Basso (1990) and Dennis Tedlock (1993: ix) have both alluded to the ways in which myths come to inhere in a landscape such that when people traverse it the land acquires meaning by virtue of these associations. Of course, Basso and Tedlock are alluding to the myths that inhere in particular landscapes for particular people; a mountain is not liable to tell me the same thing that it might tell a Western Apache or a Quiché Maya. Yet the Runa case seems to suggest the opposite; elements of the game master cosmology are not culturally specific but self-evident, and even apparent to sensitive outsiders such as Simson.

How can this be? I suggest that this is the case because such cosmologies are something more than cultural. An extreme cultural relativist position would hold that culture, like the Saussurean sign, is arbitrarily linked –i.e., constructed– such that meanings are not grounded in any "material" circumstances or anything else that might be evident to an outsider. The Runa case, by contrast, indicates that many elements of a cosmological system are relevant and even co-produced by outsiders. Culturally and historically sedimented meanings surely are important,

yet other factors are important as well. Human cognitive propensities to recognize certain salient features of organisms in a similar fashion (but see Chapter Two) and other such propensities to create metaphoric correspondences surely resulted in Simson and the Ávila Runa comparing the tapir to the horse. Similarly –to draw on an example from Chapter Six– game master cosmology reflects certain kinds of structural economic, political, and environmental features. Runa ecological cosmologies are not just a culturally specific representation of the forest. Rather, they constitute a form of dialogue with powerful beings.

Because in many ways Simson is so similar to the beings that control the forest, it is logical that he would understand the supplications of the Runa. Ecological cosmology is a kind of dialogue and that dialogue is directed toward and involves people like Simson. It is little wonder, then, that he can understand the "language" in which it is spoken.

The goal of this dialogue is to obtain access to resources. The following final chapter turns to the question of how the Runa create strategies that permit them to have access to the good of the forest.

# Chapter Nine

# Strategies of Access:
# Tapping the Wealth of the Forest

## Introduction

This final chapter traces how the Runa develop strategies of access to the goods of the forest. Like the city, the forest is seen as a repository of enormous wealth that can only be tapped by establishing relations of exchange with powerful beings. Commerce with the game masters is driven by the same aspirations that have informed Upper Amazonian relations with outsiders since the arrival of the Spaniards. As Anne-Christine Taylor perceptively notes, in such early dealings Upper Amazonians hoped, "that they might still find their own equivalent of *El Dorado* –to wit, a type of white man finally willing to establish profitable, symmetrical, and intelligible relations with them" (Taylor 1999: 218). Although she is speaking of relations among people, her comments apply equally to the relationships of commerce that the Runa wish to establish with the beings that control the forest. This final chapter of my dissertation is concerned with showing how the strategies of access to the goods of the forest are closely related to this native search for "*El Dorado.*"

## A Shamanistic Aesthetic

Attitudes and activities that can be loosely grouped as "shamanistic" are central to these strategies of access. Writing of the Wayãpí, Campbell (1989: 112) is wary of the hypostasy implied by using the noun, shaman. Shamans are not a kind of person, rather they are persons engaged in a kind of activity; there are no shamans, he says, just people that shamanize. The Ávila Runa, by contrast, do label people using categories that correspond roughly to the term "shaman." Such terms include **tahuacuyu** (with tobacco), **miricu** (the meaning of this to be dis-

cussed shortly), and less frequently, **yacha** (knower) and **upi** (drinker, i.e., of **aya huasca**), as well as **sagra** and **bruju** (from the Spanish, *brujo*) to refer to sorcerers. It would be ethnographically unfaithful to ignore the ramifications of these native acts of "hypostasy." Nevertheless, one implication of Campbell's concern is relevant to the Ávila case; a focus on "shamanizing" can encourage one to see such activities as a grouping of attitudes and strategies that can be applied by many kinds of people –men and women alike– in ways that need not be related to healing or harming. Indeed, a "shamanistic aesthetic" permeates all of Runa life. Such an aesthetic, as I define it, is an attitude towards life that encourages individuals to seek personal empowerment by mediating across the charged boundaries that separate beings of different statuses.

One important class of beings whose power the Runa draw on shamanistically is Spanish-speaking non-natives. An area in which this is particularly evident is in the way in which Spanish terms are sometimes used in Quichua. For example, in Ávila, shamans are often referred to as **miricu**. This term has been used to designate shamans throughout the Quichua-speaking Upper Napo since at least the 1910's (Porras 1955: 25; Gianotti 1997: 149; Muratorio 1987: 295). The power of this term seems to reside in the fact that it is a bilingual pun. As such, it captures two concepts simultaneously; it is a Quichuaization of the Spanish word for doctor (*médico*) and it contains the Quichua verb "to see" (**ricuna**), in its agentive form, **ricu** –seer. These two meanings, when taken together, form a very powerful concept. Doctors, like shamans, appear to have control over life and death. Furthermore, being able to "see" the world from different ontological points of view is the defining feature of shamans (Viveiros de Castro 1998).

Code switching itself is a powerful shamanic act; not only does it imply the ability to know the world from two different perspectives, as marked by competence in each language, but it also signals the ability to mediate between the two. By simultaneously embodying these two perspectives, a pun, such as that implied by the use of **miricu**, is exquisitely shamanistic. The term **miricu** brilliantly highlights the fact that shamans are able to "switch codes," not only in their ability to communicate with game masters, souls, and animal familiars, but, additionally, in

their ability to access the power structures of the white world.

The power of the term **miricu** is also derived from the ways in which the other great shamans –the Catholic priests (see Chapter Seven)—have employed this term in the Upper Amazon. Indeed, the term **miricu**, for shaman, is first visible in the literature at about the time that priests begin to use the metaphor of the doctor to describe their own position of mediation vis-à-vis the Runa. As Gianotti says, the terms missionary and doctor (*médico*): "are two words that are almost always synonymous" (Gianotti 1997: 125); priests of the 1920s even referred to themselves as, "doctors of the soul" ("*médico[s] del alma*" ) (Gianotti 1997: 127).

One could make the case that the priestly use of the term "*médico*" is also shamanistic. As I have argued in Chapter Seven, priests are thought of (and often consciously portray themselves) as shamans, akin to indigenous ones. However, whereas the Runa index their shamanic power quite generally by the use of Spanish, the priest's index theirs by invocations of modern science and technology. As opposed to the realm of religion, medical science is also an ontologically distinct domain that requires its own strategies of mediation in order to tap its power. The priests, then, as shamans, administer to the soul with the tools of modern medicine.

Code switching between Quichua and Spanish is also profoundly shamanistic in ways that are not explicitly tied to curing. For example, when a man chopping down a tree at a garden clearing **minga** utters "*palo*," (Spanish for "timber") instead of the traditional Quichua warning "**yuyangui"** (be aware, watch out), he is acting shamanistically. By uttering a Spanish word as he harnesses the power of an enormous canopy tree that is crashing down and threatening to obliterate anyone in its path, he seems to be invoking his power to mediate between Spanish and Quichua and connecting this to his personal strength as demonstrated by his ability to harness the awesome force of a falling canopy giant.[90]

The political structures imposed on the Runa seem also to have been understood within this shamanistic aesthetic. From the beginning of the 17th century until the 1940s, more or less, indigenous leaders in this region were appointed by colonial and later republican authorities

(Oberem 1980: 97; Muratorio 1987: 215). These **varayu**, **huinaru** or *justicias*, as they were variously called, were expected to mediate between the local community and the government (Oberem 1980: 228). In the recent past, at least, such appointments seem to have conferred tremendous honor, according to the Ávila Runa. Although today a locally elected board consisting of a president, vice president, secretary, treasurer, and various assistants mediates between the local community and the government, here too, the young Runa men who are elected to these charges think of themselves as privileged mediators and look on their short careers as elected officials as a moment that defines them as powerful adults. As individuals appointed to mediate between the Runa and the outside world, such officials are acting shamanistically. Indeed, this seems to be how the Ávila Runa see these positions. Although such officials are not necessarily practicing shamans, among the Canelos Runa, according to Whitten, the government-appointed indigenous officials tended to be powerful shamans (1976: 220).

Not all strategies of access to powerful non-natives are shamanistic. The tradition among Quichua-speaking highlanders of establishing fictive kinship (*compadrazgo*) ties with elites is one example of another kind of strategy. Perhaps precisely because this is not shamanistic, however, this form of accessing power is not popular in Ávila. Although *compadrazgo* is very important in Ávila, its use as a means of forging ties with powerful outsiders is much less developed than it is in the highlands. The lowland Runa ambivalence to white godparents was explained by one rubber estate owner, writing in 1913, in the following way: "The belief is that if a child has only a white godfather it will surely go to Hell" (Porras 1979: 44). In Ávila, *compadrazgo* is seen primarily as a way to forge life-long ties of reciprocal obligation with village age mates. Although some people in Ávila search out powerful whites, such as the mayor of Loreto or the priest, as *compadres*, this practice is not as prevalent as it is in the highlands. Knowing how common it is in Andean communities for foreigners to be asked to serve as godparents, I was surprised to find that in Ávila few people were interested in having me play this kind of role. It seems that the Runa were willing to give up short term profits, in the form of gifts that I would be expected

to provide during my field work period, in order to use the opportunity of the birth of a child as a pretext to forge more reliable long-term bonds with fellow villagers. *Compadrazgo* in Ávila is a strategy of cultivating bonds with equals; shamanism, by contrast, is used to form bonds with more powerful beings.

Throughout history the Runa—as simultaneously "civilized" and Amazonian—have served as mediators between lowlanders and Europeans (Hudelson 1987). This quality, above all others, contributes to their attributed power as shamans in the eyes of other lowlanders. The Achuar, for example, think of the Pastaza-area Runa as the most powerful shamans and even go to apprentice with them. The power of these shamans is explicitly attributed to their proximity to whites, particularly the fact that many of them work at the jungle military base Montalvo with its airplanes and other signs of material power (Descola 1996a).

The Runa also see themselves as crucial mediators between Whites and local worlds. This role has its advantages but it can often prove onerous as well. For example, a story is told in Ávila that a *patrón* sent some Runa to hunt an enormous jaguar that had been killing the cattle on his *hacienda*. He loaned them a shotgun—for at that time very few Runa owned guns—and provided them with ample ammunition. When they successfully killed the jaguar they were rewarded by the *patrón* for this deed with a large quantity of Peruvian blowgun poison. It turned out, however, that the jaguar they had killed was the "dog" of the local game master (see Chapter Five). Angered by the loss of his dog, the game master made this curare ineffective and the Runa were unable to hunt with it.

As this example indicates, there is a sort of competition between the *patrones* of the "above" world and those "inside" the forest (see Chapter Six); the Runa are placed in the delicate position of mediating between these two. Both kinds of *patrones* can empower the Runa through their gifts –the estate boss with his coveted curare and the game master with his meat. Yet, although both are similar in their powers and motivations, they are also in conflict with one another; the game master's "dog" is a predator of the estate boss' cattle and the estate boss' peons are

predators of the game master's "dog." As mediators the Runa are caught up in this conflict and they must bear the brunt of the game master's punishment. Such mediation is both canine and shamanistic. The Runa, are like the dogs of the *patrones* in that they do the bidding of their masters. As predators in the forest, however, they become like jaguars where they kill "real" jaguars that, in turn, are acting as the dogs of their forest masters. It is through these charged webs of mediation that the Runa must negotiate.

Runa shamanism is often portrayed as an autochthonous source of power in resistance to, separate from, and threatening to, the State:

> As such, curing shamanism (*el chamanismo de curación*) is distanced from institutionalized national society and it passes undetected by the State, in part because it is in the interest of the group for it to be this way. By contrast, aggressive shamanism (*el chamanismo agresivo*) or "sorcery" ("*brujería*") creates social disorder and, as such, it becomes a problem for the State. The paradox lies in that, in some ways, it is the absence or weakness of the State as an agent that regulates social conflict, which makes possible the persistence of sorcery (Muratorio 1987: 281).

It is not enough, however, to say that sorcery thrives in the absence of a strong State. Not only does it react to pressures associated with the State (Salomon 1983) but, in many ways, its very power has come to depend on the strength it can draw from the forces associated with the State. The question, then, is not of how shamanism, as a distinct mode of power, persists vis-à-vis the State but how shamanism functions as a strategy of access to the powers that the State is seen to hold.

The relation of shamanism to the State and its powers points to a curious phenomenon. It might, at first, seem ironic that the Runa should find empowerment by entering into relations in which they are clearly the inferior party. But this is missing the point. In fact, the Runa are very critical of abuse. The story of the family that escaped an abusive debt-peonage relationship by going to live in the underwater world (see Chapter Six) is a good example that some hierarchical

relationships are deemed unacceptable. Indeed, such situations are unacceptable because the Runa find it impossible, under these circumstances, to tap into this network of power. Hierarchy in general, however, seems to be an integral part of shamanism, for it is through their privileged access to powerful beings that shamans derive their own power.

Because of its dependence on the various networks of exogenous power, shamanism, by nature, is an open system. As such, shamanizing rips open epistemologically closed circuits. When applied to ecological cosmology, this openness is paradoxical because it exists simultaneously with the tendency to see the world of nature and the powers that govern it as fixed (see Chapter Eight).

**The Economy of Access**

The world of the forest is similar to that of the city. Both are repositories of vast riches to which the Runa only have restricted access. For example, on a hunting trip to Cucutu Chimba Urcu with Ascencio and his adult son Oswaldo, we came across a sizeable troop of woolly monkeys. I was able to observe them well with my binoculars and counted thirty or so individuals. According to zoologists, healthy troops of this species range in population from twenty to sixty (Emmons 1990: 129); the troop that we observed was well within this range. However, in the forest, and repeatedly at home as well, Ascencio, a veteran hunter and accomplished observer of natural history, kept excitedly recounting how we had come across a troop numbering two hundred or more. This statement puzzled me. He was not boasting, for this was something he began saying as we were still in the forest, and, after all, I thought, we had all seen the same monkeys. Only later did I understand that his claim about troop size might be a reflection of his understanding of the relation of what we saw to a larger reality; those monkeys that we were able to see, it appears, were just a small subset of the enormous troops that the game master actually controls. This enormous troop is what we had encountered in the forest, even if we were only able to see a few dozen individuals and Oswaldo was only able to kill one of them. The wealth of animals controlled by

the game masters is unfathomable even if the Runa have limited access to it.

Animals need not ever appear on the landscape in order for the Runa to consider them present. Those that are considered locally out of range are nevertheless thought to be present. They are **ucuta**. That is, "inside" the domain of the game masters (see Chapter Six). I first became aware of this on a hunting trip I made with Juanicu, his son Adelmo and his son-in-law Nicólas to the headwaters of the Asna Yacu in the foothills of the Sumaco Volcano west of Ávila. We were camped out in an improvised thatch lean-to shelter. Juanicu was smoking tobacco to ward off jaguars, storms and spirits when Adelmo asked him why there were no squirrel monkeys (**barisa**) in the mountain forests in which we were hunting. These monkeys tend to forage in large troops in flood-plain regions and tend to avoid terra firme forests far from large rivers (Emmons 1990: 115). They are completely absent from the Ávila region but very common at lower elevations, particularly, the Ávila Runa say, around the town of Coca on the Napo River, where Ávila men sometimes go to work on nearby plantations. To Adelmo's question, Juanicu matter-of-factly replied that such monkeys did exist up in the mountains where we were camping. The reason that we cannot see them, however, is that, as the pets of the game masters they are kept "inside." If the squirrel monkeys live in the game master realm up in the mountains, Adelmo then asked, how do they get to the lower elevations where they feed and are seen by people? Juanicu replied that the game masters transport these to the lower regions in their pick up trucks and bush planes.

Animals that biologists would consider to be locally extinct from over-hunting, such as the white-lipped peccary and the spider monkey (**maquisapa**), are similarly thought to be present but withheld from hunters by the game masters. During that same hunting trip, Nicolás asked, "why are there no white-lipped peccaries?" ("**imanata huangana mana tian**"), to which Juanicu simply replied, "they're shut up" ("**tapanusca**"). What Juanicu meant was that white-lipped peccaries, like the squirrel monkeys, are also "inside" where they exist in abundance. But they are closed up in pens and are not released. **Tapana**, is derived from the Spanish verb, *tapar*, which means to close or cover up. In Quichua, its use often implies that access is impeded—as in the

imperative statement, "**punguta tapai**" (close the door). Animals such as the white-lipped peccary are present but the Runa's access to them is restricted.

Animals of the forest exist in unchanging abundance. What is variable is people's access to them. Factors deemed important for animal population viability by conservation biologists, such as human population density, hunting pressure, and the reproductive rate of the animals being hunted, are not seen to be directly linked to game availability by the Runa.

People in Ávila are well aware that human population pressure has caused a decrease in game availability but the ways in which these two variables are seen to be connected points to a profound difference between Runa, and "Western" ways of understanding ecological connections. Specifically, they point to the importance, according to Runa ways of thinking, of establishing certain economic relations of exchange that have their own norms and etiquette.

For example, Ventura explained to me that because of the influx of colonists in the past twenty years, game has become scarce. Ventura had in mind specifically the growing presence of Archidona Runa that have settled along the southern bank of the Chaca Yacu in an area that was once an integral part of Ávila territory. Most of these Archidona Runa live more permanently in settlements closer to roads and towns and they come to these outlying settlements primarily to hunt.

Listening to Ventura, one might at first think that he is positing a causal relationship between increased hunting pressure, due to the presence of these settlers, and declining game populations. Ventura, however, does not see these factors as causally connected. According to Ventura, the underlying reason that explains why game has become so scarce in the region is that the game masters are now withholding their animals. This is because they have become angered by the Archidona Runa who, in general, are less respectful of the game masters than the Ávila Runa. The Archidona Runa, he claims, do not observe the proper taboos regarding hunting. They shoot animals and let them escape wounded to die in the forest without recovering their bodies. Because the game master's "pets" are wasted, he prefers to keep them locked away in their pens.

As Ventura explains, "his pets are wasted, [so] he shuts them up in their pens" ("**paipa huaihua perdirin, tapan paipa curalman**").

Ventura's explanation of game depletion raises an important point. The perspective of conservation biology implies that humans can control nature. Activities, such as over-hunting, directly impact animal populations, and controls, such as conservation measures, allow animals to flourish. The Runa, however, have no interest in controlling nature in this sense. What they wish to regulate, by contrast, is their relationships of access to nature (Ridington 1982: 417 in Muratorio 1987: 259). It follows, then, that the Runa do not feel they can control the numbers of animals in the forest; they can only be responsible for their ability or inability to access these. Nature, then, is a fixed entity; the only thing that changes is the ability of people to have access to its riches.

As the examples above indicate, the Runa can only tap the wealth of the forest, like the wealth of the city, if they establish relations of access with the powerful beings that control them. As Blanca Muratorio perceptively notes regarding the Runa of the Tena region, hunting success is dependent on the ability of hunters to prepare themselves in such a way so that they can, "propitiate and placate that hierarchy of spirits" that constitutes the game master realm (Muratorio 1987: 259). But whereas Muratorio points to an opposition between social strategies directed towards outsiders –such as priests and colonists– in an attempt to keep them out of hunting territory, and those directed towards the game masters, in order to procure meat (ibid.), I see these strategies as quite similar.

Proof that this is so, in the Ávila case, is that, contrary to the Tena-area case, there is a near-complete lack of interest in defending traditional territory against settler encroachment. The Ávila Runa today live and hunt on a fraction of the land their grandparents used. They seem to have given up quite voluntarily much of the land that they once exploited and do not express bitterness about this.

More important, however, is that, with outsiders, as with game masters, the goal of the

Runa, as Anne-Christine Taylor has pointed out, is to establish relations of exchange that are symmetrical, intelligible, and profitable. It is in this sense that strategies of access to the goods and powers of beings that are hierarchically dominant over the Runa are similar, regardless of context.

Regarding hunting, the Runa feel that the exchange between game masters and people should be reciprocal. Although the game masters are in a dominant position, and therefore, according to the Runa, obliged to be generous, they too expect certain things in exchange. A man that wants to become a good hunter will ingest **aya huasca** in order to communicate with the game master. When confronted by the game master under the influence of this substance, he might make the following demand: "we are hungry, give us your animals." The **curaga** will then respond something along the lines of, "fine, but don't just leave the animals wounded" ("**ama unguchisca saquingui**").

Establishing relations with dominant beings, then –be they game masters or powerful whites– requires a certain kind of etiquette and comportment and it conforms to a certain understanding of what the Runa consider to be a proper exchange between unequals. This first became evident to me on the hunting trip with Juanicu, his son, and son-in-law. As we got into premontane forest, passing the last fallow of a hunting camp, we became caught in a tremendous downpour. Game masters of distant forest regions are very wary of people they do not know and often cause storms because of this. Juanicu immediately cautioned me not to laugh, for my laughter could offend the game masters. In the deep forested domain of the game masters, activities that are for the most part acceptable in the village and its environs such as joking, farting, or playing with animals, is strictly prohibited.

We took shelter from the storm at the bases of **huapa** (*Virola* sp., Myristicaceae) and **sacha yutsu** (*Calliandra trinervia*, Fabaceae-Mimosoideae) trees that had grown close together. Juanicu took out from his net bag some kernels of feed corn that his wife had placed there earlier that morning. He then inserted them in the detritus of a crevice in the base of the **sacha yutsu**

tree. He later explained that he had given the corn to the "**amu sacha runaguna**" (the forest people lords) so that they in turn would reciprocate with "little birds" (**pishcuguna**)—a polite euphemism for game when speaking in the presence of the masters (see Chapter Five). To describe the offering of corn, he used the verb **cuyana**, which is employed to describe the giving of a gift (as opposed to the verb **carana**, which refers to giving food). The following day, Juanicu again placed corn at the base of a tree and supplicated the game masters not to make it rain. These efforts notwithstanding, our hunting trip was unsuccessful. Juanicu's son-in-law managed to kill only a trumpeter and his son, a nocturnal curassow. Such an expedition is expected to yield peccary or woolly monkey or other large and fatty animals. On our final night camping out in the forest, Juanicu and his son-in-law discussed their frustration. Juanicu stated that the game masters were acting niggardly in not giving them any game

**shínami mitsanun** […]
that's how they withhold (Spanish, *mezquinar*)

**apiscapi**
if I could get

**shucstu capi**
even if just one

**ishcai capi**
or two

**chilla ña**
just that

**mana mas**
nothing more

**tucurin**
that's it

"Witholding the animals, they don't send them out into the forest" ("**mitsasasa mana cachanun**"), Juanicu continued. Nicolás then asked if "inside" there where white-lipped peccaries. Juanicu responded with a list of all the rare and coveted game that the masters have but do not release into the forests

**huangana yanga tapa jundaranun**
white-lipped peccary, for no reason, shut up, [their pens] are brimming

**huangana**
white-lipped peccary

**lumu cu- sahinu**
collared peccary

**cutu**
howler monkey

**paushi imata**
currassow or anything

**yacami ima**
trumpeter what else

**yutu ima**
tinamou anything

**mas jundarallapicaman**
until they're completely overfilled

**paiguna mitsas mana cachanun**
witholding, they don't send them out

[…]

**yanga mitsanun**
they just begrudge for no reason

Juanicu was frustrated with the unwarranted stinginess of the game masters. He had given them gifts of corn and only wanted one or two animals in return. This seemed to Juanicu like a reasonable exchange, especially considering that the game master's pens were overflowing with all manner of animals—even with those, like the white-lipped peccary, that had not been seen in the forest for years.

As we broke camp on our final day, frustration turned into anger as Juanicu faced the prospect of returning to Ávila empty-handed. He turned in the direction of the lean-to that had sheltered us for three nights and loudly proclaimed to the game master, "you don't give me anything" ("**mana imata cuyahuangui**").

Similar demands of equitable exchange are made of **runa puma**, or were-jaguars. Ventura recounted to me how the jaguar spirit of his recently deceased father had killed one of his chickens. This angered Ventura tremendously, for this was not the treatment befitting of a son. He recounted to me how he spoke angrily (**piñasa rimarcani**) to his father's jaguar spirit in the following manner

"**ñuca mana shuca nircani**
"I'm not another, I said

**camba churi cani**
I'm your son

**snata**
so

**atalpata**
the chickens

**ñuca illapisca**
even when I'm gone

**canga randi cuidajuna cangui**" **nircani**
you have to take care of them," I said

EK: **aha**

VA: "**snata yanga can mana valita rapi mana valingui" nircani**
"so if you do bad things for no reason, you're worthless," I said

**"mana mana urcuta risa sna rangui" nisa imanasa nisa rimarcani ña**
"if you don't go to the mountains [i.e., to hunt for yourself like a real jaguar in distant forests] is that what you are going to do?

**-na nipi randi**
so, speaking like that, then

**"can randi caipi tiajusaca**
if, on the other hand, you are going to stick around here

**ursa**
you are obligated [**ursa** from the Spanish *fuerza*, as in *a la fuerza*]

**shu mashtita**
[to bring me] just one, what's its name

**shu ima tunu animaltas apisa cuyahuangui" nircani**
it doesn't matter what kind but you should catch at least something for me," I said

Shortly after this reprimand, Ventura's father's jaguar spirit recognized his obligations and gave his son a gift:

**chimanda ña mana unai carca**
after that it wasn't long

**casi quinsa punjachu carcama-**
I think it was only about three days

**sinallapi**
just like that

**shu ali sicuta apisa cuyahuarca ña**
he caught an agouti for me

**hm hm**
yeah

Ventura described in great detail how this "gift" was presented to him. When he was out, a neighbor happened upon the freshly killed agouti carcass in disturbed vegetation near Ventura's house. This neighbor then alerted the family. When Ventura got back in the late afternoon his family, in turn, told him and he went to investigate:

**chi huasha** […] **illa- mashtichu imachari**
so then I took the small shot gun, no, I mean

**retruta**
the breech-loader

**retruta apisa ña rircani**
grabbing the breech-loader I went

**"ricusha" nisa ña**
just wanting to go see

**ricunacaman chi apisca ricurin**
but before actually seeing [the carcass], you could see where he had grabbed it

(*The next five words are rattled off in rapid clipped succession*)

**punja–n**
a shi–ny clearing

**quihua**
the weeds

**punja'**
[were trampled] shiny

**aisa'**
pulling

**pusha–**
leading

**apasa risca ña**
it took it away

EK: **ah ah**

VA: **chita catsircani catsircani**
I followed and followed that

**chipi ricupi ña**
then when I looked

**cai**
this

**cai umá umallata pitisca pitisca ña**
this here head, just a head cut off

**tucuilla**
everything

**uma muy- uma muyushtuta chi chau (?) saquisca**
just the little skull that had been bitten off (?) was left

[…]

**chi huasha chibi ricupi chibi chunjulicun- ichusca**
after that, looking around there the intestines had been discarded

**chunjulicunata**
the intestines

**chita chitas**
that, that too

**apá–n ali alilla maillapi ali tupumi carca ña**
is good to take, washing it well, it was really good

EK: **a ha**

VA: "**alcu huahua micuna" nis-**
thinking of it as, "food for the puppy"

**tuparcanchi**
we found it

**chimanda cutin cutin mas apasa ris- carca sna mana yapa caru ña**
then again he dragged it further, but not too far

**chi tupullapi**
just a short distance

**chipi**
there

(*indicating with his hands*)

**entiru pai pai paimanda chaiman ña**
the whole thing, from his… to this part

**tucui micusca ña**
everything was eaten

EK: **ya**

VA: **ña caimanda ishcandi changata alilla ña**
but from here on both legs were still good

**chita pangahua tapasa**
covering that part with leaves

**chi ucut- saquisa**
there inside [he] left it

**saqui'**
just left it

I dwell on this example at length because it provides a glimpse of what forms these gifts come in. On the one hand the kill site was quite messy, with intestines strewn around a trampled space and half of the body consumed by the jaguar. On the other hand, the presentation of the gift was quite civil. The meat was left in the house garden or its adjacent fallows –as opposed to deep in the forest. Furthermore, the were-jaguar left Ventura the hind legs, which are considered the prime cuts. The intestines, as Ventura noted, were "freebies." As he indicated, they would make great "puppy food." But, as the context of that statement indicates, his family in fact ate this "puppy food" with great relish. Finally, Ventura's father's **runa puma** had covered the portion meant for Ventura and his family with leaves. When people receive gifts of meat (**huanlla**) from relatives—at a wedding for instance—these are always wrapped in leaves (**maitu**). It is appropriate, then,

that Ventura's father should present his gift in this fashion.

What I would like to point to in these two cases is the way in which demands are made of powerful beings for meat. Both Juanicu and Ventura did everything necessary to ensure proper relations of exchange. Juanicu provided corn and, in the mountains, we observed all of the proper etiquette so as not to offend the masters. In Ventura's case, the obligations expected of the **runa puma** are inherent to the father-son relationship and Ventura was not expected to give anything in exchange. In both cases the men felt that their demands were reasonable; Juanicu just wanted one or two animals for his hunting party; Ventura wanted just one animal and he was not being picky, he told his father; it could be of any kind. And in both cases, when these beings did not act generously the men said that they did so for "no good reason" –**yanga**– meaning that their stinginess was incomprehensible given the terms of the relationship that had been established.

The ways in which Juanicu and Ventura attempted to establish relations of exchange with the game masters and **runa puma**, respectively is quite different from the norms of behavior that are expected in the more intimate and egalitarian setting of the community. In Juanicu's case, I have never heard him, or anyone else in Ávila, making such overt demands to villagers. I have heard him, however, demanding cigarettes in this fashion from politicians who occasionally venture to Ávila during election "season." He and others will also frequently use this tone of voice to demand fishhooks from me when they encounter me on the trail. Powerful outsiders such as foreigners and politicians are seen to have an over-abundance of wealth that they greedily hoard. The Runa will openly confront them, reminding them that they are being stingy (**mitsana**) and demand goods from them. This is very different from the "cultural intimacy" (Herzfeld 1997) associated with villagers and the ways in which they interact among each other.

The verb **mitsana** seems to be derived from the Spanish verb *mezquinar* (to be stingy). This word, in its noun form, is used repeatedly by 18$^{th}$ century Jesuits to describe how Amazonians thought of the relationship of priests to the wealthy abundance of the afterworld realm. In reference to the Tupian Omagua conception of the afterlife, Magnin (1988 [1740]: 477)

states: “they will then have manioc in great abundance, meat and drink as much as they want, and, most important, a great quantity of women, which here the priests, because they are stingy (*por mezquinos*), prohibit them” (see Chapter Six).

Ventura’s case is interesting because it shows how intimates can also become outsiders. Ventura’s father’s were-jaguar stands in an ambiguous relationship to the family he left behind. On the one hand, the **runa puma** had become **shican**, literally Other. As Ventura explained to me, a were-jaguar, “becomes another kind” (**shuc tunu tucun**); it becomes “transformed into an animal” (**animal tucusca**). Because his father has become an outsider in this way, Ventura could make overt demands of his father’s spirit. On the other hand, the fact that the **runa puma** also embody the soul and person of the deceased explains why Ventura feels that his father still has an obligation to provide for him in a way that an outsider, with whom one has not previously established a relation of commerce, does not.

The **shican** status of were-jaguars poses interesting problems. Because they become “just” animals, most Ávila residents have no qualms about killing them, even when they are known to be relatives. Killing such a **runa puma** severs all ties between the human soul residing in the jaguar and the living. It is not clear exactly what becomes of such souls, but they are not seen again. As Ventura said, when you kill one of these, “they will no longer have encounters with people, they just abandon them” (“**mana mas cutin runahua tuparinga, ichunlla**”). Despite their **shican** status, the were-jaguars have human souls and attributes. In particular, they retain the identity they had when they were living. This identity complicates matters; people cannot treat the **runa puma** as Other without consequences. Indeed, on a number of occasions Juanicu has shot at a jaguar in the forest, only to dream that night of the “person” he had wounded, revealed in his true human identity. For example, out in the forest hunting, Juanicu once encountered a large jaguar crouching in the following manner:

**imaita**
how was it that

**alpashtulla**
it was so low to the ground?

**atun can**
it's big

**sina casnallata muntuyan**
but even so it was tightly piled up

**misicuintashtu**
like a little kitty

**bulari'**
all wrapped up in a ball

Juanicu readied his small muzzle-loader, a gun that is not very effective against jaguars. When he looked up, he could only see the joint of one of the jaguar's paws

**mucu cai tupu muculla ricuran**
the joint looked like a big knee like this

**amuca illan ña**
you couldn't see its owner [**amu**, see Chapter Seven] [the jaguar]

**chi'**
but there he was

**sirin alpahua**
lying on the ground

Then Juanicu fired

(*the following in a very low voice with intensity*)

**tya**
[sound symbolic adverb imitating gun firing successfully, see Chapter One]

**tsi'o—**
[a vocalization made by the jaguar as it was hit]

**tey'e—**
[sound symbol of ammunition hitting its target, see Chapter Four]

**hou'u—$^{h}$**
[a vocalization made by the jaguar]

(*rapidly and somewhat more softly*)

**tey tey tey tey**
[sound symbolic of shot hitting the jaguar's teeth]

**quiruta uyasa rin**
[the shot] making the teeth audible as it passes

The shot shattered the jaguar's teeth but otherwise only severed some of its whiskers. The jaguar ran off and Juanicu did not pursue it. Instead, he shoved the severed whiskers into his pocket packed up the jaguar's half-eaten quarry, and went home. That evening he dreamt

**tuta nuspaipica**
in my dreams that night

**nuspachihuarca**
he made me dream

**chishimanda unailla nuspachihuan**
from the early evening, for a long time, he made me dream

•

**chi ricupica**
then when I saw

(*softly, with rising intonation indicating surprise*)

**ñuca pari- huañui cas carca**
it was my deceased godfather

[…]

**runa puma**
a were-jaguar

**nuspachin**
caused the dreams

**muscuchihuan**
made me dream

**nuspachihuan**
it maked me dream

**chaipimari**
then

**y**
and then

**“cumba” nihuan**
“*compadre*” he says to me

**“can imasna imata sin rahuan nin cumbaniri casna rarcangui”**
“how is it that you can do such a thing to a *compadre*?”

**“ñucaca cuna imahuata micusha” nin shimi pascapica**
“now with what will I eat?” he said, as he opened his mouth

**$h^ha$–**
[jaguar-like panting]

**“mana causa micu tucuni”**
becoming like this, I won’t be able to eat enough to survive

**“mana causa micu tucuni”**
becoming like this, I won’t be able to eat enough to survive

**imasna paquirircachari**
how could it be?  it seems they were all broken

**paquirisca**
broken

[…]

**“imana cuna- mana micui tucuni**
“how will it be, now I won’t be able to eat

**casna tucu- huañungara-” nihuarca**
becoming like this I’m going to die,” he said

**“casna tucus- huañungara-” nihuarca**
“becoming like this I’m going to die,” he told me

**chitami indiru illac’ cuintachihuan**
that’s how he told me everything [i.e., transparently, openly]

**casna cuindan**
that's how it tells you

**casna alma tuta nuspaipi cuindan**
that's how the soul tells you when you dream at night

**balarcani chita**
I shot it

**cacharcani**
I sent it off

The were-jaguar, as Juanicu's recollection indicates, is an ambiguous being. On the one hand it reveals its true identity as a person. In dreams, Juanicu on another occasion explained to me, the were-jaguar is recognizable in its true human form; in this sense, the feline body houses a Runa soul. On the other hand, however, the were-jaguar is an animal. Juanicu felt no remorse about shooting this **runa puma**. This ambiguity is most evident in the last portion of the narrative. After recounting how he had had a full conversation with the soul of this jaguar, Juanicu then simply said that he shot it and sent it off. Whereas in his recollection of the conversation in the dream he treats the spirit interlocutor as a person, when he describes how he shot and sent the jaguar off, he describes the animal as an object –using the word **chita** (**chai** "that" + **-ta** direct object marker) to refer to the wounded animal.

As these examples indicate, the status of intimate or outsider is relative. It is not necessarily marked by any essential qualities. Ventura's father was an insider when he was alive but as a **runa puma** he has become like a stingy provincial-level politician that must be constantly reminded what he owes his constituents in communities like Ávila. The same applies to me. Juanicu or Ventura, as well as others in Ávila, might demand gifts from me in an aggressive –and sometimes even rude– fashion. However, the moment I go to live with these same people—as I would often do since I would rotate from house to house depending on whom I needed to work

with at the moment—I would be treated as an insider. As an insider all such demands would stop –only to resume once I moved to the house of another person.

Negotiations with outsiders are tense and confrontational and, in their charged nature, quite different from relations with villagers. I witnessed this one afternoon returning from the Saturday market in Loreto. I was with about twelve people from Ávila. We were crammed in the back of a pick up truck that belonged to a wealthy colonist from the coast who had a ranch with extensive pastures alongside the gravel road that led towards Ávila. Well before arriving to the terminus of the road where we would get off to walk the remaining distance to Ávila, this rancher stopped his truck in order to charge the fare. He stopped early to make sure that the people would not get off without paying, as apparently they had done before. It was a very tense situation, several of the men were announcing that they would not pay. Others were trying to confuse the driver saying things like, "she's paying over there" and pointing to a sister. Some tried to get me to pay their fares, claiming they had no money. Others offered to pay but did not really make an effort to do so until the driver or his assistant came up to them and insisted. One man even seemed to have gotten away without paying.

Such behavior would be unheard of among Runa in Ávila proper; it is standard however when dealing with outsiders. That the Runa distinguish between the way they treat outsiders and locals regarding money and other commodities has been noted by many. As Oberem notes, "they apply the commandment 'thou shalt not steal,' only to themselves and accordingly they consider theft licit regarding outsiders" (Oberem 1980: 37). The Runa thought nothing of stealing food and other items from Oberem and his expedition. Oberem recounts that they would even pull nails out of fence posts erected by *hacendados*. Nevertheless, "among themselves they hardly steal, this is why they leave their houses unlocked during the many times in which they abandon them for weeks or even months" (Oberem 1980: 37). Stealing from whites is not seen as a moral transgression but as one strategy of access to the goods of powerful beings. That such interactions also conform to a specific cultural logic of exchange is underscored by Taylor's remarks

regarding theft and looting during the early colonial period:

> The frenzied plundering and pillage by many piedmont groups—highly unusual in the context of traditional patterns of lowland warfare—may have been a negative relation to the colonists, but it remained a relation: Forced exchange is not at all the same thing as the absence of exchange (Taylor 1999: 218).

The formulas for "negotiation" between the Runa and the game masters today in Ávila bear a striking resemblance to the formulas used in the 16th century by the Quijos to negotiate a peace settlement with their new Spanish lords. This is a further indication that the world of the game masters is seen as similar to the world of powerful outsiders and that this similarity requires that certain norms of exchange be observed.

A decade or so after the 1578 uprising of the Quijos, a *cacique* was attacked by a dog owned by a mestizo. This event fomented unrest among the Quijos and the priest Pedro Ordóñez de Cevallos was named *doctrinero* to the region in order to pacify the natives. He met for negotiation with several *caciques* in Baeza and presented them with a contract. This consisted of nine points in which certain rights of the Indians were protected and their complaints addressed, and nine additional demands that the Indians were to concede to the Spaniards. Ordóñez de Cevallos requested that the elected war paramount Quispa Senacato approve these points and that he suggest additional ones as well (Oberem 1980:91-93; Ordóñez de Cevallos 1989 [1614]: 425-428). These requests were forwarded to Senacato who responded that he approved of the eighteen points but added, "and I ask for another five and concede an additional five, those that our Father [i.e., the priest] wishes" (1989 [1614]: 426).

The specific formula—"five for me and five for the powerful master," in this case the priest—that Senacato used in his negotiation with the priest is reproduced in Ávila today when observing certain restrictions (**sasina**) related to hunting and fishing. Relations with game masters are seen as a kind of negotiation in which the Runa must follow a "contract" that must be met (**pactachina**) in order for the game master, in turn, to fulfill his part of the deal. These contracts

bear a striking resemblance to the 16th century negotiation between Senacato and Ordóñez de Cevallos in its numerological symbolism. For example, Runa men sometimes ingest the river bank plant **yacu sasa** (*Cuphea* sp., Lythraceae), **yacu gatun** (*Liabum amplexicaule*, Asteraceae) and **yacu guilu** or **yacu quilu** (*Dichorisandra hexandra*, Commelinaceae) in order to establish relations with the lord of the rivers (**yacu curaga**) who will then allow them access to abundant fish. The plants are taken on three occasions interspersed by long intervals. On the third occasion on which a man ingests them, he is taken (**pushana**) to the underwater spirit world. Afterwards, he becomes a good fisherman. The following taboos must be observed after ingesting these plant substances. Food must be eaten cold[91] and without peppers or salt. More important for the argument at hand, this diet or restriction (**sasina**) must be observed for ten days; five of these days are for the plant and its master and the other five days of the diet are for the man ("**paipa pichca punja, runapa pichca punja**").

Another situation in which this kind of "contract" is established is regarding the use of the anaconda teeth as a hunting charm. The anaconda is a master hunter that is associated with the water domain but hunts in the forest using a kind of telepathic power to attract game. Specifically, it is said to call in (**cayachin)** its prey using its teeth. When one has come to possess such a charm, one must observe the following "diet" (**sasina**): for ten days (five for the charm and five for the Runa) one must abstain from hot pepper, sexual relations and proximity to women, and one must eat all food cold.

**What the Game Masters Want**

Exchange with the game masters is two directional. The game masters have their own needs that they expect to fulfill through their relations with the Runa. These primarily involve sex and marriage. A **yacu runa**, or master of the rivers, can sometimes "steal" a Runa girl. This might happen, for example, if she were to drown in the river. He will marry her in the water world and then proceed to provide her family—his new in-laws (**jauya, aulla**)—with abundant catches

whenever they go fishing. Similarly, a game master from the forest domain might steal a Runa child in order to have him or her marry one of his own children; their weddings are even thought to be officiated by priests living "on the inside."

The nubile daughters of game masters are also often eager to pair up with Runa men. They are attracted to Runa men, Ventura explained, because these are seen as exotic. Ventura himself married a woman from the distant Puyo region because he did not want to marry someone from his village that he already knew well. This principal of exoticism, applies, he explained, to "inside" and "above" people alike.

"Inside" lovers sometimes meet their Runa partners in the forest and these relations might even produce children that grow up in the game master realm. Game masters have also been known to enter Runa abodes and form sexual relations with married women. This causes much consternation for Runa men –their wives can bear children that are the (partial) product of these encounters.[92] But these game master lovers will also provide game by making animals easily available for the cuckolded husbands to hunt.

Although the game masters have an abundance of animals that they raise as pets or domesticates (**huiahua**), they too must form relations of exchange in order to acquire meat for their own consumption. This seems to stem from a pan-Amazonian aversion to killing pets. The Runa do not make semantic distinctions between domesticates and pets; both are **huaihua**. Although they will raise chickens to eat, pets in general are not eaten. This aversion to eating pets is also projected to the world of the game masters, for these too, do not eat their own animals. As Juanicu explained, regarding monkeys, "they don't kill their own pets; they go to the domains of others to kill them" ("**paigunapa huaihuata mana huañuchinun shuman huañuchinun**").

This aversion to killing pets actually drives the game masters to establish relations of exchange with other such game masters in order to get meat. This is evident from the adventures of Lucas Siquigua in the game master realm as Juanicu recounted these to me. Lucas went to live in the game master realm for two weeks and married a woman –an **ucu huarmi**– from there.

When he was first establishing this relationship he went to sleep with her in her house but found an enormous black jaguar (**yana puma**) chained under her bed. This was like a mean guard dog (**millai alcu**). This jaguar wanted to eat Lucas but the **ucu huarmi** –the jaguar's master (**duiñu**)– simply said "**chini chini**" ("nettles nettles") and the jaguar cowered into a corner. The Runa ward off their dogs by whipping them with stinging nettles and, once trained, dogs will respond to the verbal threat of this punishment. The awesome jaguar controlled by Lucas' "wife" was well trained and submissive.

In order to marry this forest lover, the couple had to amass game meat, just as for Runa weddings. Providing meat for the wedding would normally be the obligation of the future groom and his family. However, Lucas was marrying a daughter of a game master who had privileged access to meat. Furthermore, he had no relatives in the realm of the game masters; so they went hunting together. At midnight (**duci tuta**), they went into distant forests so that the jaguars/dogs of the **ucu huarmi** could hunt. She took them off their chains and sent them into the forest; each went in a different direction. She could never let them out in this way during the day because they would kill any person they encountered. Hunters sometimes venture in the forest as early as two or three in the morning, but midnight is considered "a time when there should be no people about" ("**runa mana purina uras**") and so it was considered safe to send the jaguars out. As Lucas and his lover talked, the jaguars were hunting white-lipped peccary. Lucas could even hear them calling, back and forth, to each other. In order to hunt these animals, however, the jaguars went to the *haciendas* of other game masters with whom they had established friendly relations. These jaguars then came back with their full bellies hanging down to the ground and with plenty of meat for their master as well. The woman then began to butcher these in much the same way whites do: skinning the animal and discarding the head and bones. She took only the choice cuts home and the fact that there was only meat (**aichapuralla**) on the smoking rack made a strong impression on Lucas; the Runa, unlike whites, eat the hide and head as well. The jaguars, now satiated, slept. The couple continued to go out hunting at night on several occasions. When they

had enough meat and the woman had prepared a large quantity of manioc beer, Lucas went to her parents and uncles to ask her hand. They consented and held a big party with the meat and manioc beer, drinking and dancing all night.

This anecdote illustrates how game masters must depend on other game masters for game. They too need meat and they must establish relations of exchange to get it. Of course, the possibility for infinite regress exists; from whom, in turn, does the game master visited by the forest wife's jaguar get his meat? Yet this kind of logical ramification is not important to the Runa. What is important to them is that all beings are enmeshed in relations of exchange and that, furthermore, these negotiations follow a comprehensible and predictable logic.

As the case of the Ávila Runa trying to scheme a ride in the pickup truck illustrates, theft and deception are also strategies of exchange. This tenet applies to the game masters as well. This is illustrated by the story of how the Terere **curaga** stole the animals from the Sumaco **curaga** (see Chapter Six). The Terere **curaga** is portrayed in this myth as a young upstart, whereas the Sumaco **curaga** is seen as a much more powerful master. Such a relationship between a lesser being who is empowered by stealing from a more powerful one is similar to the way the Runa sometimes see themselves in relation to the powerful colonists from whom it is acceptable to steal.

**From Predation to Domestication and Mercantile Exchange**

Many traditional Amazonian cosmologies explain the vast majority of ecological interactions in terms of predator/prey relations (Descola 1996b, Viveiros de Castro 1998). In Ávila, however, this way of understanding ecological interactions imbricates with a variety of other forms. Many of these forms, in turn, are directly related to certain kinds of larger political and economic systems in which the Runa have been engaged. The Runa today understand the relationship between hunter and game in a variety of ways that reflect this complex history.

Regarding Amazonians, the 18$^{th}$ century Jesuit Missionary Juan Magnin observed: "they

have a foolish belief, that many of them live by, that since they are immortal, they would never die if it were not for violence or sorcery" (Magnin 1988 [1740]: 475). This idea that death is only caused by volitional aggressors is a logical corollary of a system of classification, prevalent throughout Amazonia, whereby all beings are considered either prey or predator. Humans are immortal and as such they are predators. If they die it is because they have become prey. That is, they have succumbed to a violent death at the hands of a predator.

This system is very important in Ávila today. People that are being attacked by sorcerers are seen as prey. For example, if an agouti, a coveted but relatively small and defenseless game animal, happens to run into the house, it must not be killed for it is surely a Runa soul being chased by that of a sorcerer in the form of a raptor (Cf. Mercier 1979: 144). The same is true of the gentle and defenseless white-necked thrush (**pasu pishcu**).

One also should not kill animals that are thin or sickly, for these can be embodiments of the human souls of infirm people. When a person is gravely ill, his or her soul can easily separate itself from the body and will often take the form of an emaciated prey animal such as an agouti. One man killed such an animal. It was so thin that its bones were readily visible. The cooked meat was red in color and not white as expected. Although the hunter did not eat it, others did. Shortly after, Lucas Grefa a powerful Archidona shaman, who lived in Ávila and had been ill for some time, died. His soul, as it turns out, was in the body of this sickly animal, and hunting this animal hastened his death.

Evidence of these battles between sorcerer predator souls and Runa prey souls are manifest in the landscape. For example, when I was staying with Ventura and his family we heard –early one morning at around three-thirty as we were drinking **huayusa**– the sound of distant humming. Everyone seemed quite interested in identifying this sound. Ventura first thought it was a jaguar roaring. Then he said it sounded like the call of a jaguar as imitated by a hunter. Intrigued, he and his son-in-law went outside to hear the noise better. Outside, Ventura said it sounded like a paca (**lumucha**). He later revised his opinion to say that it sounded like a mating

pair of the snakes known as **anuna machacui**, for when these mate, it is said, they sound like pacas.

Finally, he concluded that the sound was the cry of the soul of a distant relative of one of the Ávila families that had been pursued by a sorcerer to this region. The owner of this soul probably resided in another community such as San José (about twenty linear kilometers away) and he or she may well share Ventura's last name (Ajón). Souls that are pursued in this fashion, Ventura explained, come to Ávila to seek the protection of their relatives (**ayllu**). The owner of the soul we had heard crying out, Ventura concluded, was certainly dreaming of getting sick at the moment that the sorcerer was chasing his soul to Ávila (see Chapter Five).

Who is predator and who, prey is contextually dependent, and the Ávila Runa take great relish in recounting stories about how these relationships can sometimes become reversed. For example, a jaguar trying to attack a large land turtle (**yahuati**) got its canines caught in the turtle's carapace and was forced to abandon not only its prey but also its broken teeth that remained caught in the turtle's shell. Now toothless, the jaguar was unable to hunt and soon died of starvation. When the jaguar finally expired, the turtle, who still had that jaguar's canine caught in its shell, began to eat the rotting flesh of its former predator (for turtles are known to eat carrion). In this way a predator was transformed into its former prey's prey.

That predator/prey classification is contextually dependent and ambiguous can be a cause of tremendous stress. For example, Oswaldo dreamt that he was out hunting and encountered a collared peccary. He did not have his gun but only had a shotgun cartridge. He was able to fire at the pig by blowing on the shotgun cartridge. To his dismay, his "prey," as it turned out, was not a peccary but a friend from Loreto. Wounded in the neck, this friend retreated into his house only to emerge again shortly after. However, when he came out he was armed and began to pursue Oswaldo. As hunters, men like Oswaldo fear that their role as predator of animals will blur with a role of becoming a predator of men. Shotgun cartridges are like blowguns in that they are long and round and hollow and packed with lethal ammunition. Furthermore, sorcerers attack

their victims by placing their cupped hands to their mouths and blowing imaginary darts (**sagra tullu**) in the direction of their enemies just as if they were shooting darts from a blowgun (see Chapter Five). Without wanting to, Oswaldo had been transformed from a hunter to a sorcerer. When his wounded victim attacked him, however, Oswaldo was the one that became the prey victim.

In Ávila there is no specific set of terms to define predator and prey. Game animals are generally referred to as **aicha**, meat. The agouti is a quintessential prey animal. The operative distinction between predator and prey in Ávila seems to be between that which is frightened (**manchan**) and that which frightens (**manchachin**) as well as between that which eats (**micu**) as opposed to that which is eaten (**micusca**). Predators of the Runa are classed as **runata micu**—those that eat people.

**Puma**, literally, feline, is often more generally used as a term for predator.[93] For example, the crab-eating raccoon (*Procyon cancrivorous*) is called **churu puma** (snail jaguar) because it is a major predator of small defenseless aquatic prey such as snails.

Some felines are also named according to morphological similarities they share with their preferred prey. The rare and variable small feline known as the jaguarundi (*Felis yagouaroundi*), depending on its fur color and pattern morphs, appears to be classified alternatively as two distinct species: the **sicu puma** and the **pandu puma**. If it is uniformly gray, it is the "**puma** of the agouti" (**sicu puma**), meaning that because its fur resembles the gray coat of this animal it is the agouti's most feared predator. If, by contrast, the fur on its head is gray and its body is black, it is the "**puma** of the tayra" (**pandu puma**) and eats this weasel-like carnivore because, like it, it has a light-colored head and a black body. Similarly, the mountain lion is often referred to as **chundarucu puma**, (the **puma** of the red brocket deer) because it resembles this species of deer due to its reddish hide and is therefore said to be the primary predator of this animal.[94]

Predators of the Runa share a variety of characteristics. Large felines, vampire bats, and **supai** (demons) are all seen as **runata micupura** (of a kind that eats people) and they all are

thought to do so by drinking the blood of their victims. Because they are predators of people, all are thought of as "demonic" (**supai**). The quintessential predator, –i.e., that which preys on people– then, seems to draw on the qualities of these three beings: like a jaguar it is a large predator, like a vampire bat it sucks blood, and like a demon it is malevolent.

The predator/prey distinction also has important gender connotations in Ávila. Hunting is seen in terms of seduction, sexual conquest, and even battery. This is evident from a variety of dreams that augur hunting (see also Descola 1989). Hunting dreams often equate females with prey. Male hunters are their predators. For example, dreaming of having sex with a woman augurs killing game. Dreaming of a badly injured woman exclaiming, "I'm bleeding" ("**yahuarujmi cani**") augurs mortally wounding game. By contrast, if a man dreams of beating his wife, and, even when bleeding from his blows, "she pays no heed" ("**mana uyana munan**") and does not respect him ("**mana quirin**"), he will wound an animal but it will nevertheless escape. Although many of these dreams are explicitly misogynistic, this does not mean that Runa men always see women in such violent and hateful terms. Rather, those elements of treating women that are misogynistic are seen to best fit hunting with its unavoidable violence and bloodshed.

The fact that game and women are seen to be connected as prey is also evident with hunting charms. Such charms, often referred to as **pusanga**, are used to attract and seduce animals and it is appropriate, therefore, that these are also used as love charms (see also Chapter Two). When men use these charms, either to attract animals or women, they want to disguise their intentions. It is fitting, then, that the most important of these charms is one made from the anaconda's skull and teeth. The anaconda, along with the jaguar, is feared as one of the most awesome predators. Yet, unlike the jaguar, the anaconda is seen to capture its prey by a process of attraction and seduction. It causes animals and people alike to become lost in the forest. They then begin to walk around in circles that bring them ever closer to the anaconda that can then crush them in its embrace. The anaconda is the kind of predator that Runa men, in search of game or women,

would like to be—one that is not recognized as such.

Of the various organisms that are used as ingredients for hunting/love charms, certainly **candarira** (or **gainari**), a metallic blue whiplash beetle (Paedarinae, Staphylinidae), is among the most visually stunning. On a collecting trip I once pulled back a mat of leaf litter to discover a pair of these slender beetles endlessly circling one another. Their metallic shine and frenzied activity was in sharp contrast to the inert detritus in which they were immersed in. The pulverized remains of these insects can be placed in the food or drink of a woman one wishes to attract. A woman that comes under the spell of this charm will madly follow the man that is responsible. Such insects can also be placed in a hunting bag where they will attract peccary to the hunter. It appears that in their endless circling, these insects bind predator and prey into one and the roles become confused. The predator chases the prey at the same time that the prey chases the predator; this confusion and role reversal is precisely the goal of seduction.

A similar confusion occurs when the wife of a young man is pregnant. Such men are referred to as **aucashu yaya** (father's of beings that are not yet fully human, or, fetus-fathers) or, less frequently as **chari** (those that have [a baby in the making]). The continuous contribution of semen that the fetus is thought to need for its growth is said to weaken men. This is because, via intercourse and the concomitant loss of semen, the man's soul is passed into the new child. As Hilario explained, "when the semen passes [into the woman] the soul also crosses over" ("**yumai pasapi chimbarin alma**"). Indeed, Rosalina once complained to her neighbor that her son had become extremely lazy and unable to hunt since his wife became pregnant. This weakened condition of expecting fathers is referred to as **ah$^{h}$uas**. Furthermore, men in this condition experience morning sickness like women and when the child is born, they must observe a period of couvade through a variety of restrictions. They also become aggressive (**millai**) and are prone to fighting.

All of these clues seem to indicate that pregnancy causes changes in the status of men. In some important ways, by making babies they lose their ability to be effective predators. This

change has a ripple effect throughout the ecological system. Animals will suddenly refuse to enter the traps of "fetus-fathers" and when such men place fish poison in the water during communal fishing trips along with men whose wives are not pregnant, fish yields will be very low.

Game animals, recognizing this new status, no longer fear hunters. Animals sense such men as mean, and, instead of becoming afraid of them, they become angered and aggressive. What is more, even skittish herbivores begin to regard these once formidable opponents as prey. Animals in the forest that are usually docile and wary, such as deer and the gray-necked wood rail (**pusara**), will suddenly become enraged and sometimes even attack these men. One man recounted to me that when his wife was pregnant, deer in the forest suddenly charged him on two separate occasions. On one of these he was actually kicked in the chest. As another example, Angelicia caught a baby coati in a spring trap and decided to keep it as a pet. I asked her if the coati was mean (**millai**). Knowing that I was single, she laughed and then responded teasingly, "only if you are an **aucashu yaya**."

The Runa, however, cleverly transform this weakness of "fetus-fathers" into a virtue; they take these men on hunting trips to use *them* as charms. In the days when white-lipped peccary still existed in the Ávila region, such men were taken into the forest and used to attract these herds. As the peccaries would furiously charge the young father-to-be, his companions hiding in ambush would kill them. Here again, through a process of seduction, predator and prey roles become reversed.

Hunting charms in general attract animals that are considered **sinchi puri**, that is, strong runners. These include tapirs, deer, and curassows. This too is in keeping with the idea that the goal of love and hunting charms is to make mobile creatures –women or animals—come to the man. The largely stationary and slow-moving sloths, by contrast, are not attracted by charms.

In this regard, it is curious that virtually all love/hunting charms that I have documented from Ávila come from animals as opposed to plants.[95] There is, however, one notable exception: **Buhyu panga** (or **buhya panga**). This is a small hemiepiphyte of the Araceae family (possibly

*Anthurium sect. Pteromischum* sp. nov., see Kohn 1992). It has the unusual quality that the torn pieces of its leaves flit around on the surface of water (it is possible that this is due to unusually high vascular pressure). The name seems to be derived from the fact that these pieces of leaves circle around in the water like pink river dolphins (**buhyu**) feeding in the mouths of lowland rivers. Like the teeth of the dolphin, this plant can become an ingredient for love and hunting charms because it is thought that with it a man can cause women or animals to become attracted to him just as the pieces of these leaves "want" to move towards each other and "stick together" (**llutarimun**) on the surface of water. In general, love and hunting charms, in their attempt to effect attraction have as their ingredients only animal products because these come from organisms that are mobile. **Buhyu panga**, a leaf that moves, is an exception that proves this rule.

A final argument in favor of the idea that predator/prey relations are understood in terms of certain ideas about gender roles is that when the operative logic of a given hunting charm is not associated with seduction or attraction, such charms are not used for love magic. For example, the Runa pass the vapor of a decoction of the vine **sacha sapallu** (*Gurania spinulosa*, Cucurbitaceae) over their hands in order to set traps. It is thought that this will ensure that animals will trip (**tacan**) the traps as they walk into them. Another example of this same logic is **indillama huasca** (the sloth liana, *Machaerium cuspidatum*, Fabaceae-Faboideae). A decoction of this forest liana is taken as an emetic in order to encounter sloths (**indillama**) in the forest. This plant is not an attractant; it does not seduce sloths. These animals are immune to this kind of attractant since they are quite immobile and stay fixed in one tree for long periods of time. By extension, this plant is not used as a love charm either.

Because males are linked so strongly to their role as predators, the animals they hunt –endowed with the consciousness to detect predators (see Chapter Five)—become wary of their presence. By contrast, women have a distinct advantage over men in this regard (this is why Narcisa's call was heard only by the doe and not by the buck or her husband as I explained in Chapter Five). Although women in Ávila rarely hunt, when they do, animals are not afraid of

them. As people often say, “they do not become wild around women” (“**huarmita mana quitan**”). Because there is empathy between female hunters and game (both are the prey of males), seduction and other strategies of conquest are not necessary.

Like the predator/prey distinction, however, the gender distinction is also relative and contextually determined. In this regard, the unarmed anthropologist is also seen as a woman. When I was in the forest on hunting or plant collecting expeditions, my Runa companion would often detect game and then tell me to wait behind as he ran ahead with his gun cocked and ready to fire. On numerous occasions, as I would wait quietly for him to return, the very animal he was pursuing would approach me instead. I had this experience with troops of woolly monkeys, capuchin monkeys, collared peccaries, and brocket deer. I would often ask why the animals would come to me instead of the hunter. People in Ávila would respond that, like a woman, I was unarmed and therefore I was not seen by them as a threatening predator (see also Chapter Six).

It is precisely because of the prevalence of the predator/prey model that the Runa mark as interesting those elements of the natural world that do not conform to it. One striking example is the order Xenathera that includes such disparate creatures as sloths, anteaters, and armadillos. Another name for this order is Edentata (which, fittingly, means “rendered toothless”) because one of the most striking features that unites this group is that they develop no milk teeth and lack true canines, incisors, and premolars. Members of this order have only peg-like teeth, if they have any at all (Emmons 1990: 31).

Teeth are central markers of predator status. This is evident with the canines of jaguars. Hilario once recounted a legend of an enormous jaguar that was killed. The canines were as big as small bananas and the women wept when they saw them, imagining how many people were killed by them; the women were painfully aware that, faced with the massive teeth of a jaguar, they are nothing more than helpless prey. However, as the turtle and jaguar legend recounted above indicates, without its canines, the jaguar loses its predator status. Indeed, it is said that a jaguar dies when its teeth wear out. Because they represent the potency of the jaguar as preda-

tor, their canines are used to administer burning pepper in the eyes of children so that they will become powerful like jaguars.

It is in this context that the members of the "toothless" order are so salient for the Runa. Although anteaters, sloths, and armadillos appear superficially dissimilar, the Runa seem to class them together. For example, the collared anteater (**susu**) is said to fight with the sloth (**indillama**) saying to it, "you have teeth and still you have thin arms. If I had teeth I would be even fatter than I already am." The arboreal collared anteater, like its larger terrestrial cousin the giant anteater (**tamanuhua**), completely lacks teeth. Nevertheless, both are formidable predators. An arboreal anteater can easily kill a dog and it is indefatigable. Such animals can withstand many shots before they fall to the ground and once on the ground a man will have to pound its head with a stick for many minutes before it dies. The **tamanuhua** is sometimes thought of as a "**puma**"; it is known to kill people and almost did kill Juanicu during the period I was in the field (see Chapter Six). Even the jaguar is said to be afraid of the giant anteater. Ventura tells that when a jaguar encounters a giant anteater sleeping between the buttresses of a tree he will signal for all to be quiet saying, "don't tap [on the buttress] my old brother in-law sleeps" ("**mana tacana masharucu puñun**").

Because the armadillos lack true teeth (they only have pegs) they too are seen as anomalous. In contrast to the anteaters, however, they are not at all aggressive and by no means can they be construed as threatening predators:

> With their broad, inflexible backs and short legs, armadillos trot with a rolling or scuttling gait, some like wind up toys, snuffling and grubbing with their noses and forepaws and seemingly unaware of anything more than a foot or two away. They have a good sense of smell but poor eyesight and will often run right into a person standing still in their path (Emmons 1990: 39).

Because of these anomalous features the armadillos are thought to have their own kind of master, the **armallu curaga**. The portal to the abode of this master is a burrow like that of the armadil-

lo. Inside there is daylight but the quarters are cramped like a tunnel:

> It is said that a man got lost in the forest and was found by the **armallu curaga** who invited him to share a meal. When the food was brought out, the man saw it as cooked armadillo. The master, however, saw it as squash (**sapallu**, Cucurbitaceae). Like a squash, the armadillo has a hard "rind" and the tangled masses of seeds enveloped by a sticky fleshy coating at the heart of the squash are seen as the intestines of the armadillo. The master had no teeth and proceeded to "eat" the food by inhaling its vapor (**cushni**) through his nose. When he finished eating, the food still looked like perfectly good meat to the Runa man. Since the master had consumed all of its life-force (**samai**), he considered it excrement and discarded it. Because the **armallu curaga** does not eat true meat, it does not defecate in a normal fashion. What excrement these masters have they use as achiote (**manduru**, *Bixa orellana*, Bixaceae) to paint their faces. This **curaga** is considered to be demonic. However, instead of eating meat and blood like other demons, it "eats" **samai**.
>
> The master keeps his armadillos in the garden where there is a **chunda** palm tree with very low fruits from which they can feed. To know if they are ready to harvest, the **curaga** taps them just like one would tap the rind of a squash to see if it is ripe. If the sound heard is "**to to**" the armadillo is unripe (**llullu**). When it is ready to eat (**rucu**) the sound heard is "**te te**." The **curaga** invited the man to gather squashes from the garden. The man attempted to do so but when he tried to grab one it would run off, vine, leaves, and all. The "**curaga** turned out to be a good person" ("**ali shungu curaga casca**") and gave the man a large squash. When the man got back to his home in the "above" world and gave it to his wife it became a large armadillo.

The legend of the **armallu curaga** points to certain distinctions that are important in Ávila. The armadillo is a valued prey item but is not itself a predator. In a "perfect" perspectival world, the relationship between prey and predator is symmetrically contextual; one being's prey is another's predator. Here, however, because the armadillo cannot eat in a "true" fashion due to the fact that it has no teeth, it is represented as a vegetable. The **armallu curaga** is also a predator of people; this is why he is labeled "**supai**." But he is a "vegetarian" predator. Instead of drinking blood (like a jaguar or true **supai**) he sniffs **samai**.

Another domain that is thought of in "vegetal" terms is that of the rivers. A dream of harvesting corn in a field, for example, augurs a successful fishing expedition. Fish are "harvested" like vegetables. This is literally so when they are gathered in nets or traps or when people can simply pluck them out of the water during fish poisonings. However, such vegetal images are also used to think of the ways in which fish are taken with hook and line. Unlike hunting, fishing does not conform to a predator/prey model. Even the anaconda –the master of the water- a powerful predator, is only said to hunt in the forest and never hunts fish or riverine mammals such as the capybara.

Although the water domain is considered to be a **curaga**-inhabited parallel world, it is quite different from the game master domain. It is much more feminine. The anaconda is the "mother" of the fish and not their master. Her fish are not pets or domesticates in the way that forest animals are for the game masters. When the anaconda does hunt on land it does so by seduction, and by inducing somnolence and finally causing suffocation. The anaconda its prey by using its "mind" (**yuyai**). It pulls animals in like fish caught on a hook and then these confused prey beings are suffocated and crushed. Furthermore, unlike the jaguar –the quintessential land predator—the anaconda, although powerful, is usually benign. Children are allowed to swim in local riverine pools of water even though it is known that an anaconda surely lurks in their deep recesses. Because the local anacondas know the children, they do not harm them.

Another important difference which, I believe, is related to the feminine status of this domain, is that the relations in the water domain are not structured by metaphor but by metonym. Whereas the forest animals of the game masters are metaphoric equivalents of Runa pets and domesticates, the fish are related to their "mother" by consanguinity. The **amarun** is their mother and not their owner (see also Descola 1994a: 327). She sees them as fish and not as a metaphoric equivalent of fish.[96]

These various alternatives to seeing relations between people and animals according to a rigorous predator/prey model points to another important axis of comparison: wild vs. domesti-

cate. As I have noted throughout this dissertation, particularly in Chapters Five and Six, the Runa are quite interested in translating between wild and domesticate domains. The world of the game masters is a domestic realm projected into the forest and dreams of domestic scenes augur events in the forest (and vice versa). Dogs and chickens, because of their position as domesticated animals act as prime translators between these domains (see Chapter Five).

The Runa are also interested in practical techniques of domesticating the wild beings of the forest. To this end, plants can be used to tame (**mansuyana**) animals that are wild (**quita**). For example, a macerated extract of the cultivated herb **upa yuyu** (dumb herb, Lamiaceae) is poured down the throats of forest birds that have recently been captured and are being raised as pets so that they will become tame (**mansu**) and will not escape to the forest. This plant rids these pets of their wild status by making them **upa** and **mansu** (dumb and tame).

**Mansu**, of course, is a Quichuacization of the Spanish term *manso*. This term was used during the colonial era to refer specifically to the Runa and other "civilized" Amazonians in contrast to the wild (*bravo*) unconquered ones (Taylor 1999: 235). The fact that the **mansu/quita** distinction is used in Ávila to compare domestic and forest spaces indicates that local distinctions, such as predator/prey, animal/vegetal, and male/female, used to understand interactions among animals as well as between people and animals, may also be related to outside understandings of these processes. I now turn to an examination of these outside ideas of wildness and domestication in order to see how they have influenced Runa ecological cosmologies.

The early Jesuits likened wild Indians to birds. Like birds they were free to escape into areas that were largely inaccessible to humans. Ferrer, for example, refers to the Cofán, with their propensity to live in inaccessible mountain settlements, in this way (Ferrer 1605). The Jesuits were very concerned that, like caged birds, wild Indians could not live in the mission settlements. Figueroa, regarding captured Indians brought to the mission center Borja, comments:

> The majority of those brought here die when they arrive to the new climate (*estos aires y temple*) of Borja, even when there are no epidemics (*peste*), and even

> though they are fertile in the bush and hills, living in their idle freedom (*se fecundan en el monte y sus quebradas, viviendo á sus anchuras*), they become so sterile in this area, that there is little population growth and their offspring do not develop well (*donde ay poco multiplíco y logro de las criaturas que les nacen*), maybe it is because here they don't have their food in abundance and they find themselves subjugated […] This impedes their natural propensity for procreation, just like with wild birds that, once captured and caged, become sterile (Figueroa 1986 [1661]: 165).

There have been many facets to this attempt to domesticate the Runa, many of which have continued into the 20th century. A major goal of the Jesuits was to transform Runa hunter-gather and shifting horticulturalists into sedentary peasants. The Josephines (Muratorio 1987: 98) continued these efforts. The Josephines also made attempts to usurp the wild power of the Runa by "scientizing" their knowledge.

This attempt is visible, for example, in the writing of Gianotti who was concerned with finding lay, medical, and above all, scientifically explicable uses for traditional Runa narcotics associated with shamanism, sorcery, and divination. He suggests that "poultices of cold **chiri huayusa**" *–Brunfelsia grandiflora* (Solanaceae), a narcotic that causes a cool sensation in the joints– can be applied, "on the chest in order to provide some sort of substitute for ice." Similarly, coca[97] infusions can be used as a cough suppressant and as a tonic ("[*para*] *sostener las fuerzas"*). **Aya huasca** infusions can also be used instead of opium (Gianotti 1997: 115). Whereas the Runa strive to access the power of nature through images of modernity—for example, cities, airplanes, pickup trucks, and motorcycles figure prominently in their ecological cosmology—outsiders have also tried to domesticate aspects of Amazonian wildness through a process of scientific translation where the end product is seen to be potent precisely because of the raw wild material it taps. If the Runa can tap white power by hunting their domesticates, the whites can tap (and control and subdue) Indian power by scientizing their wildness. From both points of view –albeit in different ways– domestication is an important process.

I now want to turn to an examination of how the Runa have adopted ideas of domestica-

tion and what they have done with them. In an Ávila tradition documented from the 1920s, when old Runa die they become jaguars and eat dogs. The Aucas, on the other hand, also turn into jaguars but, instead of eating dogs, they eat the Runa (Dávila 1920: 462). The distinction between Runa and Auca were-jaguars is important because it points to two distinct "styles" of predation. The first is a predation tinged with and confused with domestication. The second one is "purer" and it leads to cannibalism. In this regard, people in Ávila remark that animals see hunters as Aucas; from the animal's (human) perspective, their predators are (human) savage enemies.

This kind of tension between, on the one hand, a "true" predator and on the other a predator of things domestic is apparent in Ávila today. For example, if gifts of meat from the **runa puma** of a deceased relative are eaten with hot pepper or boiled in a stew with grated plantain (**lugru**) the jaguar's claws will fall off. Thus declawed, the jaguar will be forced to prey only on the domestic animals of Runa households and not on the animals of the forest. This can also happen when, say, a son fails to observe the proper taboos of not handling steel tools and guns after a **pumayu** parent has died (see Chapter Five). In many ways, then, the Runa are concerned that they have become too domestic.

There is also a profound irony regarding how people in Ávila think of the relationship of domestication to wildness. For example, the further one gets from the village, that is, the deeper one gets into the wild reaches of the forest, the more like a city this space becomes. There exists a correlation between increasing wildness and increasing control by the game masters. One can laugh, fart, or make fun of animals in the woods and fallows surrounding Ávila, but these mundane acts become serious and dangerous transgressions when one is in the deep forests –the abodes of the game masters. Waterfalls at the headwaters of streams –one of nature's most awesome features– are actually the portals that lead to the cities of the game masters.

Furthermore, those that enter into that world lose their domestic nature and become wild even though the space is essentially urban. This is evident in the example I cited in Chapter Five. Ventura as a child became lost in the forest, along with his dog, and the game masters led him to

their realm. When he was finally rescued, both he and his dog had become feral (**quita**). That is, they lost their domestic (**mansu**) nature. The dog did not bark back when called to and when Ventura was finally found he did not recognize his own mother and was even afraid of her. The deeper into nature one gets the more civilized, but also the wilder it gets. This is also evident in the Runa claim that the biggest and fiercest jaguars of the forest are were-jaguars or **runa puma**. "Normal" forest jaguars (**sacha puma**) are not as threatening as these are.

If Europeans saw Indians as wild animals that needed to be tamed, Amazonians saw the power of whites as residing in their domesticates. It is precisely because of the images that they have of powerful predators and the idea that these can be controlled by even more powerful masters, that the Runa and their ancestors seem to have attributed an enormous power to the relationship between cattle and horses and their European owners. For example, in the 1578 uprising in Ávila discussed in Chapters Six and Seven, the "god of the Christians" appeared in a vision to a native shaman lord in the form of a cow. Furthermore, one of the obligations that this vision dictated was to eradicate all of the Castillan crops from the landscape.

Indians expressed rage against Europeans via actions against their cattle throughout the Jesuit period as well. Maroni writes of a rebellion in the Cocamillas mission in which the insurgents burned down the houses, tore down the church doors, and "speared to death some cows that were there" (Maroni 1988 [1738]: 221). In more contemporary Quichua myths, cattle also figures prominently. For example, Wavrin recounts a myth of the sun that stops at high noon to eat a bull that his mother prepared for him (Wavrin 1927: 326). And the Inca kind is said to found Quito by swinging a bull around his head (see Chapter Six).

It is in this context that the distinction that Norman Whitten makes between the "**ali**" (good) and "**sacha**" (forest) Runa should be understood. According to Whitten:

> **Alli Runa** is the "good Christian Indian," a stereotypic association of traits projected onto a model of Catholic brokerage between external chaos and native adjustment. **Alli Runa** –**cari** and **huarmi**—accept less than fair share in trade

> from the church; the men work for no recompense for the *Padre* and their wives give the finest piece of ceramics and ample manioc to the same *Padre*. Their sons may be sent to work for a few cents a month cleaning his house and garden plot, while daughters cook, sweep, and keep house for him and for the "*Madrecitas*." **Sacha Runa**, in this context, is the real person embodying a continuum from human knowledge and competence to spirit power. **Sacha Runa** walks without fear through **Amasanga's** [a kind of spirit master, something like a game master] forest domain with spirit helpers to ward off spirit darts, knowledge to help him get whatever he needs, from medicines to food, and strength to confront any human, animal, or spirit adversary (Whitten 1976: 219).

In Ávila, Whitten's **ali runa/sacha runa** dichotomy works best regarding the **runa puma**. The **runa puma** is simultaneously thought to be fierce –like the top predator of the forest—and servile, like the dogs of the game masters (see Chapter Five). This domesticated quality of Ávila Runa identity is not a veneer that covers an essential and primordial Amazonian fierceness, but an integral part of local identity; as Whitten says, "*Alli Runa and Sacha Runa are one and the same*" (ibid., emphasis in the original).

The Ávila Runa can never be just **ali** or just **sacha** because there is no point from which they can step out of one identity into the other; these poles have become intertwined. In Ávila, as opposed to the Canelos case, wildness –the **sacha** pole– is associated with whiteness and Christianity. These qualities have permeated the deepest recesses of the forest and it would be hard to think of them as **ali** (good) in the way that Whitten describes for the Canelos region, for their power is clearly wild (**sacha**).

The Runa dialogue with outside ways of thinking about the people/forest interchange goes beyond general notions of domestication and its relation to wildness to more specific reflections on particular economic systems in which the Runa have been embedded. One way in which this can be seen is through different perspectives on the concept of labor or *trabajo*. The Jesuits, in their discussions of Amazonians, were quite fond of creating correspondences between the wild forest and the domestic garden: "they find for the sustenance many nuts (*cocos*) and fruits that

nature, like an orchard, provides them" (Figueroa 1986 [1661]: 263). And, because such gathering activities did not involve "labor" as defined by Europeans, they were indicators of Indian laziness:

> Their livestock (*crias*) are those that need no care: the herds of wild pigs that are generally found in large numbers in the forests, the many kinds of monkeys, wild fowl, like guans, curassows, ducks, and many more that populate the skies and branches of the trees (Figueroa 1986 [1661]: 263).

The Jesuit recognized a correspondence between white domestication and Indian predation in the forest. The Runa today highlight this same correspondence. What the Runa see as wild game animals are seen as (introduced) livestock by the game masters (see Chapter Six).

Yet in this passage Figueroa makes the additional claim that not only does hunting and gathering mimic agropastoralism but that it is also morally inferior because it requires no labor. Today, the related idea that the Ávila Runa are "lazy" because they do not understand the concept of labor is repeated in Loreto by priests and colonists alike.

In Ávila, a related correspondence is recognized between forest gardens that require no effort to maintain and laziness. Shrubs of **tuta pishcu lumu** (the bat's manioc, *Tococa chuivensis* and *Clidemia heterophylla*, Melastomataceae) form colonies in the understory of primary forest. Because of certain substances secreted by ants living in cavities inside the inflated bases of their leaves, no other plants can grow where these colonies are found. These are said to belong to a certain mythic bat. In mythic times the bats (**tuta pishcu**) were human ("**tuta pishcu runa cashca uras**"). Because they were lazy, they planted **tuta pishcu lumu** instead of manioc and subsisted on its leaves. The colonies of these plants are called bat gardens (**tuta pishcu chagra**). Indeed, these resemble perfectly cleared gardens. The difference is that the plants seem to weed themselves and hence the do not require any effort. Manioc gardens, by contrast, require extensive manual weeding. These "bat" plants also resemble manioc in having a subwoody stem and somewhat terminal leaves.

One might conclude from this example that the Runa have adopted missionary concepts of labor. In some sense this is true. For example, many people in Ávila feel that it is improper to "work" on Sundays. By work they mean doing paid work like interviewing or plant collecting with me or, alternatively, felling trees or carrying out other major domestic chores. Yet the idea of labor that the missionaries wished to impose has by no means been adopted full scale. The majority of Ávila Runa do not think of themselves as laborers. As one man remarked with some disgust about one of his sons who had abandoned village life to work permanently as a field hand on the colonist ranches on the other side of the Suno river, "he wastes his life working" ("**yanga trabajashpa causan**"). By making this comment, this man did not mean to say that his son had being alienated from his own means of production through wage labor. In fact, his son was quite proud of having picked up many of the nuances of coastal Spanish and his new found ability to pass as a colonist. Rather, what his father meant was that what the Runa refer to as "working" as a field hand should not be thought of as an end in itself or a permanent activity.

All Ávila men have worked on estates and plantations. Such wage labor is necessary. Not only is it a source of cash but it is also a source of knowledge. Although the little cash they make is quickly spent, the knowledge of Spanish and white ways they obtain is seen as crucial for their maturity as men. Wage labor is also seen as fun. Men enjoy the ease of having three square meals prepared for them at the ranch. They also often go in groups, and age mates form life-long ties through these shared experiences. Wage labor, however, is not a permanent way of life, and this is what disturbed this man so much about his son.

Despite rejecting much of the "ethos" of labor, the Runa have nevertheless adopted much of the terminology of a mercantile and monetary economy. One salient example is the way in which the term **duiñu**, or owner, has become a synonym for person (see Chapter Seven). Another example is the ways in which people in Ávila calculate their "debts" –what they owe and what they are owed—regarding reciprocal labor prestation (**minga**) in the community. For these calculations, the verb "**dibina**," (from the Spanish, *deber*, to owe) is used.

Another area in which mercantile terminology is readily seen is regarding marriage exchange. Women are bought (**randina**), sold (**catuna**) and, increasingly, stolen (**shuhuana**). In-laws can sometimes become angered because the groom still owes them (**dibina**) payment for his new wife (see Chapter Six). A widowed daughter-in-law and her children can also be returned (**intrigana**, from the Spanish, *entregrar*) to her parents by her father and mother-in law (residence is patrilocal). The mercantile tone of these transactions notwithstanding, these terms are not completely interchangeable with the economic concepts they reference. For example, brides are "bought" with food and drink, not money or goods. This is in keeping with Amazonian notions of exchange in which the goal is a kind of empowerment through the exchange of bodily substance (food, drink, blood, semen, clothing) and not of objects (Viveiros de Castro 1998).

A final important economic concept that is used in Ávila is that of **pagrana**, literally payment. This seems to be closely related to the colonial and republican institutions of tribute and forced sale (*reparto*). During the period of the *encomienda* (roughly 1550-1730) natives of the Ávila region, like others of the Quijos region more generally, were forced to pay tribute to *encomenderos*.[98] Tribute to the government and to clerics continued well into the republican period until its abolishment in 1846. This institution was replaced by the *reparto* system. This system involved the obligatory sale, at elevated prices, of goods to the Runa twice a year (Oberem 1980: 112). The Runa then were given "*licencia*," or permission, to retreat to their distant **tambu** or **purina** houses (secondary residences) for several months to produce the gold or **pita** fiber (depending on the region) necessary to pay for these goods. During this period the Runa still had to provide gifts and payments to priests and government officials in return for services. The *repartos* were finally abandoned at the beginning of the 20$^{th}$ century and were replaced by the debt-peonage system (1980: 117).

A portion of one myth frequently recounted in Ávila clearly alludes to tribute payment

> A man-eating jaguar, known as **mundu puma** or **Galeras puma**, after depleting much of the Runa population, was finally trapped in a house of stone in the Galeras

> mountain range (see Chapter Three). Each new year (**mushu huata**, January) the "nephews" of the **mundu puma**, such as the jaguars, mountain lions, ocelots, and other cats of the forest, would climb Galeras Mountain to give the trapped jaguar gifts of food. The nephews feared that if their uncle were to be presented with game meat, his taste for human flesh would be excited and he would again break out and kill all the jaguars and also decimate the human population. To conceal the fact that the nephews are meat-eaters, they would instead present to him mice and especially the hind legs of **puma jiji** (a kind of grasshopper that is armed with spines and can jump great distances like a feline) instead of giving him the cuts of game meat that he expected. To protect themselves, the nephews would very carefully extend these to the jaguar through a hole in the cave wall using a stick. Up to this day, it is said that every year when the nephews bring these grasshopper legs and mice to their uncle, he asks them why they did not bring him human flesh (which he refers to as palm hearts, **chunda yuyu**). Every year the nephews respond with the same lie: there is no human flesh available because the Runa population is not growing.

Other versions of this myth have been documented by Wavrin (1927: 327-328), Orr and Hudelson (1971: 24-27) as well as Gianotti (1997: 199-200). Gianotti's version is interesting because the gifts the felines give to the man-eating jaguar are explicitly equated to the tithe: To this day, he says, they bring this jaguar, "the tribute of the first fruits of the forest as well as [meat from] their own hunting" (1997: 200). The relationship between the jaguar and his nephews is similar to that between the Runa and those outsiders to whom they were forced to pay tribute and receive *repartos*. Like the man-eating jaguars, colonial and republican authorities took any advantage of the perceived wealth of the Runa to increase tribute payments. Such abuses directly affected the well-being, and even the viability, of the Runa population. This relationship is brilliantly captured in the myth by the recognition, on the part of the nephews, that if they bring more than grasshopper legs and mice every year, the jaguar will become blood-thirsty and he will begin to eat the Runa again.

The Runa did everything in their power to avoid the burdens of tribute and were openly bitter about its imposition. Such frustration is evident in the ways in which the Runa in the mid-19$^{th}$ century were said to make fun of priests to whom they were forced to offer chickens and

other food in return for permission to hold celebrations where there would be cane alcohol and dancing (see Oberem 1980: 113):

> They accompany the procession singing refrains (*un recitado*), to the rhythm of a small drum, in which they would say to the priest in these or similar terms (for these depend on the imagination of those that improvise them): Take our goods that we bring you, the fruits of our labor and our sweat, gorge on them you sly bastard (*hártate pícaro*) and thief etc., etc. The person that comes up with these insults is regarded as the most able singer (Jiménez de la Espada 1928: 359-360).

The clever deception of the nephews captures this attitude of resistance well.

Tribute and *repartos*, however unfair, were a necessary evil; the Runa were dependent on this system for a variety of manufactured items. However unjust –indeed, prices of items under the latter system were as much as fourteen times cost (Muratorio 1987: 91)— exchange conformed to a comprehensible and norm-governed system. Similarly, today in Ávila, various tribute-like payments are necessary for proper exchange to be possible with the beings of the forest. For example, when a tapir is killed a tip of the ear is cut off and from the hoof a bit of the hide is also taken. A stick is inserted in the ground near the house of the person that killed the animal and the strips of hide and flesh are place in a perpendicular fashion in a slit at the top of the stick, making a cross. Alternatively, a payment of corn or some necklace beads can be left. These are thought of as payments (**pagrana**) offered to the game master in exchange for allowing the Runa to kill such a large animal. The game master will use the flesh and hide to make a new tapir and the beads to make its intestines.[99]

Failure to make this payment can even result in the game master coming to kill the hunter. However, a more likely punishment is that, in the absence of the other offerings, the "game master will take" (**amu apan**) the meat of the killed animal in order to make other tapirs. If this happens, the supplies of meat will "rot (it will literally decompose into foam) and become flavorless" ("**putsucalla upa tucun**"). Weighing as much as two-hundred-and-fifty kilos, tapirs are the largest forest mammals. As such, the efficient processing of their meat virtually requires their

insertion into a network of redistribution that extends well beyond the nuclear family. Such a large quantity of meat is very difficult to smoke effectively and there is always a threat that it can, turn to "foam" (**putsucu**).

Tapir meat is referred to as **jucha aicha** (sin meat). People in Ávila say that hunters are only allowed to kill ten of these animals in their lifetime and men will know, and even proudly recount, exactly how many they have killed. If meat is distributed to all neighbors and relatives and the appropriate payment is made to the game master then it is not considered a sin to kill a tapir.

When the Ávila Runa still made trips to the Huallaga river for salt they also were forced to pay tribute. They were obliged to "pay" the **cachi mama,** or salt mother, –a giant anaconda living in the deep pools of the river in exchange for permission to take this item back. The person that did not throw a large chunk of salt in the river –her required payment– would be killed by the anaconda.

I would like to end this section with an analysis of another form of "tribute" that also incorporates some of the other elements of exchange between the Runa and the forest that I have discussed. Juanicu, as mentioned above, as well as other Runa, pay game masters feed corn and peanuts. By receiving these, the game masters, in turn, are obliged to give the Runa meat: "**apisa randi cuyan, munu, huangana cuyanun**." It is said that the game masters covet such offerings because they do not possess these crops. The game masters do not eat these, nor do they feed them directly to their animals. Rather, they plant the seeds in order to produce feed for their "pets." The Runa, then, give "true" domesticates to the game masters, who then use these to feed their "figurative" domesticates that, the Runa hope, will then be given to them as wild game.

**Conclusion**

In this final chapter I have explored some of the strategies that the Runa have developed to access the goods of the forest. These, as it turns out, are remarkably similar to the strategies

used to access the goods of the city. It is not that one is the model for the other, but that both are informed by a similar shamanistic aesthetic of empowerment. Although in Chapter Seven I showed how whiteness has become an essential part of the Runa sense of Self, this chapter, by contrast, is about Others –that is, it is about ontologically distinct kinds of beings– and the strategies for appropriation that commerce with them requires. The hierarchy present in the game master/afterlife realm that, at first seemed so unsettling in Chapter Six –for how can there be inequality in a utopian afterlife?– is crucial to a shamanistic system. As shamans, people can readily access the power of ontologically distinct beings and they are therefore no longer alienated from these sources. Indeed, without such hierarchical distance, there would be no power for shamans to tap.

The idea that the goal of ecological understanding and practice is access –as opposed to some sort of notion of knowledge-as-representation– links the economic strategies I have discussed in this chapter with the poetic strategies with which I began this dissertation. What Juanicu (with his gifts of feed corn and implorations to the game masters) and Maxi (with his attempts to recreate immediate forest experience in his stories) share is the notion that the forest is potentially knowable and accessible. I use the word "potentially" because the problem the Runa face is one of access and not representation. A representation seeks to capture –albeit imperfectly– everything about its denotatum. A strategy of access, by contrast, recognizes that the forest harbors unfathomable wealth and that a small portion of this wealth is *potentially* available. Ascencio's claim that there were hundreds of monkeys in a troop even if only a few dozen were actually visible or accessible to us, is commensurate with the view of Runa ecological knowing that I proposed in the first two chapters. That is, knowing the forest is like tapping its wealth; both activities presuppose that there is more to it than what meets the eye. An approach to ecological understandings that focuses, for example, on the forest as a symbol for a local notion of the State, or on the static codes of ethnobiological classification, would not be able to recognize the open nature of this system, nor the intimacy of the Runa's engagement with the forest that it permits.

# Conclusions

## Concluding Summary of the Argument

In Chapter One *–The Aesthetic of the Immediate–* I assumed, for heuristic purposes, an artificial stance of naiveté. I put aside, for a moment, considerations of the impact of larger structuring forces such as cosmology, social organization, and the political economic context to ask how it is that the Ávila Runa make sense of forest experience. This approach of bracketing experience is useful because it can reveal what is distinctive about natural engagements and not just how other topics that are the standard concerns of anthropology are refracted through it.

I chose to begin my examination of forest experience by analyzing an adolescent's performance of a failed peccary hunt. I could have chosen to analyze a number of other speech events but settled on this one for two reasons: 1) the fact that it was a failed hunt and not one that could be easily bragged about kept the experience closer to the level of the mundane, 2) the fact that it was told by an adolescent highlights that this form of talking is not something restricted to elders but part of a shared body of attitudes towards experience held by residents of Ávila in general.

Focusing on how people "just talk" about forest experience led me to question the usefulness of the analytical category "knowledge" as a starting point. If people do not readily talk about, say, plant names and their classifications, why should we use such categories as entryways to questions of how they make sense of the forest? Nature knowing is not just about content; it is also about the framework in which that content is placed. Examining an act of knowing, here the recreation in poetic performance of a peccary hunt, allowed me to capture certain important local attitudes towards experience. Such attitudes are the foundation upon which I build the ethnological argument in this dissertation.

To this end, my goal in the first chapter was to show how local ecological understandings are constituted at the level of individual engagement in the forest. In order to do so I chose the category "aesthetic orientation" as a point of departure. By focusing on aesthetics rather than, for

example, symbolism, my goal was to ratchet down the concept of culture several levels to a point where its sensorial, embodied, experiential, and subjective nature could become more readily apparent. By bringing culture down to this level in this manner, I find it easier to study how natural engagements can be something, at once cultural and social but also personal, cognitive, and in "resonance" (Ingold 1996: 40) with an environment that extends beyond the human. If I were to have begun my study at a more abstract level this step to the non-human would have been much more difficult to take.

My interest in aesthetic orientations as a way of bringing the study of lifeways closer to the ground, so to speak, allows me to address the human/nature relationship in a very productive fashion. I devoted the second chapter –*The Leaf that Grows out of Itself*– to this concern through an analysis of how the Ávila Runa make sense of organisms that they consider anomalous. I asked, what is the relationship between local ecological understandings and the world? Beginning from the premise that reality is socially or culturally constructed only begs the question. As an alternative, I focused on three theoretical approaches to this problem. Each provides the germs for arguments that acquire weight in subsequent chapters of the dissertation. The first draws on the work of Roy Bhaskar. He shows how both realist and constructivist approaches conflate how we know the world with how the world is. They both use the category of experience to define the world. The realists hold that experience can give us direct knowledge of the world whereas the constructivists hold that we can only know that which we experience. Bhaskar's importance, for my concerns, is to indicate a way in which a self-conscious separation between ontology and epistemology –that is, an awareness that there is a gap between how the world is and how we go about knowing it– is necessary for knowledge to be possible. The Runa share this view; throughout this dissertation I point to moments of their uncertainty and doubt, to the spaces they recognize between tidy models of the world and the unruly world those models try to capture. Knowledge –as opposed to ideology– at this local level is precisely about pushing beyond the frontiers of the known and engaging with a world that is always somewhat beyond understanding.

The next theoretical position that I adopted in this chapter is drawn from Putnam. The point he makes that I find useful for the problem at hand is that perception of the world in not an interface that produces a representation for the mind. Rather, it is a form of cognitive contact. Such a position resonates well with my insistence on moving away from an understanding of nature knowing as a form of representing the world to viewing it as a means of access. This argument runs through virtually every chapter.

The final theoretical approach I used in this chapter is "ecosemiotics." I asked, how would the problem of the relationship of knowledge to the world change if we look at ecology as a process of the interaction among situated subjectivities rather than one involving the law-governed interactions of objects? Natural systems have developed in large part due to the interplay of differentially perceiving subjects. Whereas a distinction between epistemology and ontology, as Bhaskar posits, is useful to understand certain distinctions between people and their knowledge and the world, it ultimately does not help us to understand the dynamics of a biotic system that is predicated, not on some abstract laws but on the interaction of different ways of perceiving the world.

The ecosemiotic argument becomes extremely important in the chapters that follow because it provides a framework through which I explore Runa interests in the perspectives from which other beings see the world and, based on these situated perspectives, how they are connected to other beings through links of communication. The culturally-specific ways in which the Runa posit ecosemiotic relations, are, in many ways, in agreement with a framework that could be used to study ecology more generally.

The next three chapters (Three, Four, and Five) constitute an attempt to trace Runa understandings of ecology ethnographically. I tried to understand how such understandings are generated out of aesthetic orientations. Throughout these chapters I emphasized that such understandings are characterized by being strategies of engagement that are based in large part on the idea that organisms are connected by communicative relations and that the ecological understandings that the Runa have are also self-consciously tentative.

In Chapter Three –*The Perpectival Aesthetic*– I focused, as the title indicates, on the "perspectival aesthetic" –another key ingredient of Runa ecological understanding. Point-of-view has been proposed as a fundamental structuring principle for Amazonian sociability and cosmology. My argument is different. In this chapter I tried to show how an emphasis on point-of-view grows out of an existential problem faced by hunters –namely, trying to understand how an animal thinks. The environment neither determines this aesthetic nor is it a product only of social or cultural forces. Rather, it is the outcome of embodied ecological engagement and the existential challenges that this poses. Whether or not such orientations then acquire a socio-cultural life of their own, as they do among the Runa and many other Amazonians, is another question. But focusing on such phenomena as only cultural or social would make it difficult to understand why they are so intimately associated with hunting and ecological understanding more generally.

In the fourth chapter –*Ecosemiotics and Metaphoric Ecology*– I examined Runa notions of semiotic structuring of ecological relationships, particularly the importance of metaphor. If the beings of the forest are seen as communicating subjects, rather than objects, what forms do those communications take and how do they come to have force? The Runa see metaphor as a central ecosemiotic link in the environment. That is, metaphoric relations are seen to have causal force on par with other linkages in the environment that would be more readily recognized by biologists as ecological such as, for example, the relationships between predator and prey.

Beginning in the third chapter and continuing through Chapters Four, Five, and elsewhere as well, I discussed the events surrounding a jaguar attack on a pack of dogs. This is a pivotal event in my ethnography because of the way it reveals people's efforts in Ávila to make sense of the unknown. In some ways it is similar, although at a somewhat different level, to the problem faced by Maxi (in Chapter One) of making sense of experience. No one actually witnessed the attack on the dogs but everyone experienced it in one way or another. The moments and days after the attack constituted a concerted effort to make the unknown known. Following the conversations –many hours of which I recorded– and going into the forest again with Hilario and his family, I was able

to witness, bit by bit, how situated individual experiences from a host of realms (barks, tracks, bird calls, omens, dreams) slowly coalesced as knowledge of what happened to the dogs.

In Chapter Five and those that follow I began to look at elements of Runa ecological understandings that are more abstract. These can be more accurately thought of as models rather than orientations. Although they grow out of the sorts of aesthetic orientations that I delineate in the first chapters, they also seem to exist at a greater remove from embodied experience.

The fifth chapter *–How Dogs Dream: Ecological Empathy and the Dangers of Cosmological Autism–* is about the ontological differences that the Runa recognize among different kinds of beings and how these are marked by different communicative modes. I turned especially to dream interpretation to get at this. This is a crucial chapter because of the way it links the first half of the dissertation to the second.

In this second half, beginning with this chapter, I began to address questions of how ecological understandings are linked to local ideas of social organization. The first and second halves of the dissertation are somewhat different in orientation. The first looks primarily inward to subjective experience and engagement as the motor that drives ecological understanding and the second looks outward to the place of the Runa in a larger political and economic framework and how this position affects ecological knowledge. I will defer discussion of the ways these two sections are connected to the final section of the Conclusions because this can best be understood within the context of debates in Amazonianist literature.

The socialization of nature, that is, how social categories are projected onto nature such that the social and natural order come to be synchronized with each other, has been an important and productive theme of research in the last two decades of Amazonianist research. My contribution to this area of inquiry is aimed primarily at getting some understanding of how such socialization works in societies, such as that of the Ávila Runa, where local conceptualizations of the social extend beyond ethnic or village boundaries to include the history of relations with the nation-state.

The sixth chapter –*The World of the Game Masters*– is about those beings that control the activities of animals in the forest. These game masters share many qualities with "white" figures, such as priests and estate owners, and their realms are often described as cities. I argued that "white" game masters represent something more than a social projection onto nature of a changing social order. Rather, Runa and white relations are articulated via the same landscape through which the Runa interact with animals. This landscape imposes similar constraints on both of these kinds of activities. For example, rubber tapping and hunting both rely on extracting resources that are sparsely distributed over the landscape. It is not, then, that society is merely projected onto nature but that a variety of economic activities engage the landscape in similar ways and they are thus closely related.

In Chapter Six I attempted to show how whiteness emerges as central to Runa ecological understanding. By contrast, Chapter Seven –*Wearing Whiteness: An Amazonian Strategy for Harnessing Power*– is an attempt to understand what whiteness means for the Runa, how it circulates, and how it can be harnessed. In this chapter I returned to many of the themes raised in Chapters Three and Five concerning ontology and point of view. If perspectivism can be seen as a "traditional" Amazonian cosmology, I tried to show in this chapter how it also incorporates content that is not traditional in nature.

Chapter Eight –*Historical Process: Co-construction, Maintenance, and Change in Ecological Cosmology*– is concerned with the historical nature of ecological cosmology: how does it emerge, how does it change, and why does it also often appear to be fixed and unchanging? The first half of the chapter is concerned with what I call co-construction. In their interactions with Indians, whites tend to present a vision of the relationship of Amazonian society to the civil order in terms that are strikingly similar to the ways in which the Ávila Runa today portray the correspondence between the game master realm and the forest. I argued that this similarity is due to three factors. The first is that many of the metaphoric relations between society and nature are readily apparent to anyone visiting the region. Horses and tapirs, for example, can be equat-

ed because they are morphologically similar due to their close phylogenetic relationship. Such correspondences are due in part to panhuman modes of perceiving organisms. More important, an organism such as a horse emerges in Amazonia in a field of power that connects Indians with whites; the image of a whiteman riding a horse is performed as an expression of his dominant position and is also received locally as such. Finally, the goal of game master cosmologies is not to represent nature or society but to try to understand how to access nature's wealth. If the beings that control this wealth are thought of as whites, then it is natural that the idiom of dialogue and supplication necessary to gain access to their goods would be comprehensible to those actual whites on which they are modeled.

Another point I made in this chapter is that despite the validation of "unmediated" experience in knowing the forest and the obvious historical nature of so many ideas of the natural environment, ecological knowledge appears to the Runa as unchanging. There seems to exist in Ávila an ideology of stasis and this exists in tension with a world in flux.

Chapter Nine –*Strategies of Access: Tapping the Wealth of the Forest*– turns more specifically to the strategies, content, and goals of dialogue. The Runa strategies for accessing the wealth –primarily in the form of game meat– of the forest are very similar to the ways in which they negotiate access to the wealth of the city. This is not only because one is the model for the other but because both are informed by the same shamanistic aesthetic of empowerment. Shamanism can be seen as a form of personal empowerment through mediation across ontological realms. It is a way of tapping into –and indeed it embraces– hierarchy. In this chapter I examined the norms and etiquette of negotiation and supplication with different kinds of ontologically distinct beings that control wealth. This chapter returns to many of the same themes that I explored in the first part of the dissertation, but at a different level. The Runa's goal regarding ecological understanding is access and not creating a representational model. This links the economic strategies I treated in this chapter with the poetic strategies, which attempt to recreate a feeling of engagement with the forest, that I treated in the first chapter. Both are characterized by

the recognition of partiality and situatedness. Just as the forest is potentially knowable, so its resources are potentially available. Knowing the forest is like tapping its wealth. Both activities presuppose that there is more available than what meets the eye. Representations are totalizing; they strive to succinctly capture everything about their denotata. Engagements, by contrast, are partial. The Runa strive to know nature precisely because they do not fully understand it, and they endeavor to tap its wealth for the same reason; because it contains resources that are seen as unfathomably vast and somewhat, although never completely, beyond reach.

**Scope and Context**

This study has focused primarily on how individuals engage with the forest and how they make sense of those experiences. Such a microlevel focus has many advantages. It allows me to show how particular moments and individuals and the words they speak matter. As a methodological focus it also allows me to get closer to that space of engagement between people and the natural world. Such engagements are fundamentally personal. People, for the most part, are alone in the forest and their interactions with animals there are highly personal. It is the voice of the individual that has utmost importance when such experiences are recounted (even when multiple voices exist, as in the examples of parallel talk I provided in Chapter Three). Dreams, which play such an important role in intersubjective interactions across ontological borders, are also highly personal. Such a focus on the individual lends itself well to the topics that interest me in this study: the creative use of speech and its relation to knowing and the world, questions of subjectivities and epistemologies, and how these questions might eventually be linked to the mind.

Focusing on the individual, however, has its limitations, and these too are evident in this study. What are the social contexts in which those individuals, and their experiences, words, and minds fit? How is the locally social connected to economic and political institutions at the regional, state, and global levels? To a certain extent, I do address these questions. For example, in my discussion of how Hilario and his family arrived at the identity of the were-jaguar that killed their

dogs (Chapter Five) I examine how they employ sociological explanations. When the family found the bodies of the dog they immediately agreed that the were-jaguar was the late mother of an enemy. Such an explanation linked this event to a local social framework and made certain lines of tension evident. However, this is only one part of the explanation. The contents of the people's dreams that evening led them to a different answer regarding the identity of the were-jaguar. I suppose that a study of how Runa society is constituted might find the discussion that Hilario and his family had in the forest interesting for the way it points to a particular moment of tension that can capture something of the nature of social alliances in the village. But I am interested in something else. While acknowledging the importance of that kind of question, my interest lies more in what the family's final identification of the were-jaguar reveals. This final identification points to a breakdown in local sociological explanations. When confronted with the incontrovertible fact that the late grandfather was the were-jaguar that ate their dogs (proof for them was that three individuals had dreamt of him the evening following the attack), they were forced to abandon social explanations; the beloved grandfather, as a were-jaguar, had become incomprehensibly "other" –or, demonic.

Glimpses of the changing social world beyond the village and its impact on the local can also be captured by a focus on the individual. For example, two hunting dreams I discussed –Oswaldo's terrifying encounter with the policeman (Chapter Seven) and Adelmo's vision of a shoe store (Chapter Six)– exist in interesting tension with forest cosmology. Cosmologically speaking, game masters are portrayed as priests and estate owners. This, as I have argued, is due in large part to the fact that these figures were the central mediators between the Runa and the larger society in the past generation. The dreams, however, are somewhat more up-to-date. They point to the emergence of a growing colonist presence with their vibrant market economy as well as the increased visibility of a burgeoning state, of which the policeman is an important representative. As I discussed in Chapter Eight, there is something conservative about cosmologies. Even when, in terms of content, they are decidedly non-traditional, they often deny the existence

of change; this, I think, is why they speak to a political economic reality of a generation ago, or more. Dreams, by contrast, are by nature much more faithful to experience. It is the juxtaposition between dreams and cosmology, and how people attempt to reconcile these, that will reveal the Runa's experience of their place in history.

As opposed to the ethnographies of yesteryear, this study makes no attempt to arrive at a holistic understanding of Runa society whereby all elements of the way people live (as judged by the anthropologist) are accounted for thematically or in terms of how they fit together. Social anthropology and political economic approaches are useful tools for this sort of holistic project; they clearly specify what is important (social relations, power, inequality, translocality) and what is "epiphenomenal." Engagements with nature, on this view, are only interesting because of the ways they can reveal the social. My goal, by contrast, is to begin with natural engagements, and to follow them along the different routes they may take me. I feel that I have found some structuring principles that unite a variety of phenomena –these in the form of aesthetic orientations– but I do not pretend that these will explain everything about Runa society.

Indeed, this study raises some questions that I am not yet ready to answer. Foremost among these concerns the problem morality. I gave some indication that the aesthetic orientations I study have some structuring effect on Runa morality. This is most evident in my discussion in Chapter Six regarding Runa aversions to ego-centered explanations of personal misfortune. I feel that I have convincingly linked this aversion to the rejection of the category Hell as an existential possibility applicable to the Runa. I have also suggested that this constellation may be related to subtle but important and persistent differences between missionary and Runa understandings of the Self and that, furthermore, this Runa view of selfhood may be closely related to the perspectival aesthetic, especially as I discussed it in Chapters Three and Five. But clearly there exist certain strong convictions of personal moral rectitude in Ávila and these are closely aligned with missionary teachings (i.e., it is wrong to kill). For the moment I can only point to some tensions between missionary and Runa understandings of morality and where these may come from. I am

not yet ready to account for, or describe, the Runa moral economy, nor the principles by which it is generated.

**The Study in Relation to Other Research**

In this final section of the Conclusions I want to give a sense of how I situate this study within the broader framework of anthropological human/nature studies in Amazonia. I have postponed this until the end of the dissertation because I wanted to build up my analysis from everyday experiences. That is, I wanted this to be, as much as is possible, an ethnography of Runa engagements with the forest, and I believe that a presentation of broader academic debates within the body of the ethnography would have detracted from this.

In what follows, I will give a sense of how I see my work fitting into and contributing to the Amazonianist literature on conceptions of nature. Without an exception, all of the works that I discuss are important in their own right and form part of productive research programs. If I am critical of them, it is from an attempt to show how these works fail to address the issues that concern me in this dissertation so as to indicate the relevance of my study.

My study does not directly engage the vast Amazonian literature on cultural ecology (also known as human evolutionary ecology or human ecology, see e.g., Hames and Vickers 1983, Beckerman 1994). This is not because of the standard humanist assertion that biological explanations have no place in understanding a people's lifeways. I share with human evolutionary ecology approaches the recognition that the ways in which people live are not solely determined by society or culture and that environmental interactions constitute a privileged lens for revealing this.

My issue with this kind of approach is really one of methodology. The study of biology and ecology should not be limited to the methods used. Admittedly, ecosemiotics –the study of the ecological relations among different subjectivities as mediated via their modes of communication– does not lend itself well to studies that rely on quantitative methodologies. But this

should not make this approach in any way less illuminating. The problem with scientific approaches to human/nature relations has to do with the ways in which the complexity –the messiness– of such relations need to be simplified in order to generate testable hypotheses.

Neotropical rainforests are among the most complex ecosystems in the world and Amazonians have very complicated forms of engagement with elements of these. Nevertheless, to generate testable hypotheses, cultural ecology-oriented approaches must reduce the complexity of these systems to a small number of variables. For example, in order to generate testable hypotheses they reduce the complex forest and river environments to repositories of two kinds of essentially interchangeable proteins –meat and fish (Beckerman 1994: 179-180). These simplifications reduce ecological engagement to the point where it is no longer recognizable as such.

Tim Ingold (1996) points to how such simplifications come, not from borrowing too heavily from the biological sciences but from applying anthropocentric and western-oriented theories to the study of ecology. He highlights in particular the complications that arise when using "optimal foraging theory" to explain the nutrient procurement strategies of hunter-gatherers. Optimal foraging theory is borrowed from neoclassical economics models that involve assumptions about the choices made by self-interested rational actors. When it is applied to animals and hunter-gatherers, however, it becomes something biological –a product of an evolutionary history, and not one of a rational mind.

If optimal foraging is part of an evolutionary history, he continues, it becomes difficult to see what can be emergent in an ecological engagement with the forest: "An approach that is genuinely ecological, in my view, is one that would ground human intention and action within the context of an ongoing and mutually constitutive engagement between people and their environments" (1996: 26). My research, broadly speaking, is in alignment with Ingold's approach; it is, in large part, an attempt to capture one aspect of this engagement –the Runa's sense of their experience of it. I do, however, see an important problem with Ingold's approach and I will discuss that shortly.

I am quite ambivalent, in general, about the prospects of combining scientific with other kinds of methodologies and this goes to the heart of my differences with many other anthropological approaches that focus squarely on people's interactions with the environment. Without wishing to detract in any way from the validity, sophistication, insight, or even impact on my own research that the ethnobiological work of Bill Balée has had (see especially Balée 1989), it would be impossible to carry out parts of my own research if I were to adopt certain programmatic statements that guide his work. If, as Balée holds, ethnobotany is, "best regarded as a field of biocultural inquiry, independent of any specific paradigm, yet rooted in a scientific epistemology" (1994: 1) how can it hope to capture those native epistemologies –which are decidedly non-scientific– that generate that knowledge in the first place?

This critique is also applicable to studies of traditional ecological knowledge (TEK) (see for example Moran 1993; Ventocilla 1995) as well as traditional resource management (e.g., Irvine's 1987, 1989 important work on the San José de Payamino Runa). As Alf Hornborg notes, the focus on TEK and traditional resource management is paradoxical because, "it hopes for an appropriation of local knowledge by the very modernist framework by which such knowledge is continually being eclipsed" (1996: 58, see also Nadasdy 1999: 13-14). That is, these approaches define and frame the knowledge they seek to study, thereby ignoring the fact that knowledge is not just about content but about the context in which knowing is produced. This, perhaps, is most evident in the very use of the term "resource management." Such a term automatically assumes that locals view the forest as a resource that needs to be managed and ignores the possibilities of other kinds of interactions and conceptualizations.

My interest is not in knowledge per se, but in the local generative processes that contribute to knowing and how these emerge in ecological engagement. To this extent Hornborg's concept of ecosemiotics is fundamental to my work because it captures an important element of the way in which the Runa see ecology and it also provides a plausible framework by which the study of ecology might be situated within a western research tradition. It is my contention that native and

non-native understandings of nature are not necessarily incommensurable. This is due, in large part, because they are not solely cultural or social.

Nevertheless, I would like to highlight an important difference between my approach and Hornborg's. This involves the way in which he automatically couples ecosemiotics with morality and conservation (an argument which is greatly influenced by Rappaport 1979, 1984). As Hornborg states: "Once we recognize that human subjectivity, along with the subjectivity of all other species, is an aspect of the very constitution of ecosystems, we have a solid foundation for the conclusion that the destruction of meaning and the destruction of ecosystems are two aspects of the same process" (1996: 53). To my mind this statement points to a confusion between the form that a message may take and its content. The Ávila Runa feel that ecological relations are semiotic but their force (or meaning) does not lie in the form (the semiotic code) or how complex that code may be, but rather simply by the fact that it *is* communicative. Furthermore, the recognition that ecology is semiotic says nothing of the content of the messages that are encoded. Nor does it say anything about the qualities of the beings to which they are directed; Runa ecosemiotics are as much about communications with animals as they are about communication with beings that resemble powerful whites. There is no intrinsic relation to the health and diversity of an ecosystem (the goal of conservation) and the fact that ecological relations can be (and often are) understood as being structured by relations of meaning.

Another concept that is central to my approach is that of engagement. That is, my goal is not to study the ways in which ecology or the environment are represented but the ways in which people live in and experience nature. My use of the concept engagement shares much affinity with Tim Ingold's (2000) work –especially regarding the way he uses the idea of "dwelling." It also shares affinities with phenomenology more broadly (see especially Casey's 1996 discussion of place). Nevertheless, there is one important way in which I take issue with these approaches and this involves the "space of culture" (Stewart 1996). I use the idea of "space" advisedly because it is precisely the concept that Casey, in his study of "place," wishes to forego. The prob-

lem, as I see it, with engagement-oriented approaches is that they are not helpful for understanding disengagement, misunderstanding, and epistemological doubt. There is, analytically speaking, a "space" for culture (see also Hornborg N.D.). It is through talking, reflecting, performing, and discussing that people engage and disengage with elements of nature. These elements are at times beyond comprehension and a concept of culture can help us get at this as well.

I wish to dedicate the remainder of this section to a discussion of my work in light of research in social anthropology on the society/nature interface in Amazonia. In some sense my research builds on, but is also conducted in implicit contrast to, this approach. Much of the social anthropological work in Amazonia on the question grows directly out of the truly sophisticated and ethnographically rich research of Philippe Descola (1986 and subsequent translations) on the ways in which the Achuar symbolically and practically socialize nature.

One direct contribution I make to Descola's approach is to show how such a system of socializing nature need not be homeostatic (Descola 1994b). Indeed, as a structuring logic, the elements that generate this system can remain largely intact even in the face of radical changes in the physical and socio-cultural landscape and political economic contexts (see also Whitten 1978). The Ávila Runa project onto nature a vision of society in much the same way as the Achuar. But they do so in a manner that is eminently historical and reflects their changing relations to the outside world.

The contrast between my work and that of these social anthropological approaches to the natural is quite fundamental. It has to do primarily with a difference in focus and the areas of inquiry that that focus permits. In so far as they are interested in nature, social anthropological approaches engage with it because of the ways in which it can reveal how society constitutes itself. As Laura Rival notes regarding the meaning that bitter manioc has for Macushi ideas of replication and continuity:

> The homological treatment of plants and humans this implies […] has suggested that Amazonian indigenous representations of descent and genealogical ties are

> often expressed using a botanical idiom. This should be no surprise to anthropologists working in the Durkheimian tradition, who document the constitutive relationship between forms of conceptual thought and social practices in distinct cultural universes. Techniques to use and exploit nature form a privileged domain for analysing this fundamental relationship (Rival 2001: 73).

Indeed, if I were to begin my dissertation at Chapter Six, rather than at Chapter One, my findings about Runa conceptions of nature would be quite similar to those working in the Durkheimian tradition. I will illustrate this by comparing my work to that of several social anthropologists that contributed to a volume appropriately entitled, *Nature and Society: Anthropological Perspectives* (Descola and Pálsson 1996). Many of the chapters in this volume begin with a statement to the effect that, "conceptions of nature are socially constructed" (Descola 1996b: 82). Such statements, in turn, are closely related to the observation that hunter-gatherers, especially Amazonians, see nature and society to be part of the same system. As Kaj Århem states: "Among Amerindians of the Amazon the notion of 'nature' is contiguous with that of society" (Århem 1996: 185; see also Pálsson 1996: 73). Both form part of a, "single and totalizing set of rules of conduct" (Århem 1996: 185). I do not doubt that there is indeed much truth to these statements. My own research bears this out. But it is tautological to study conceptions of nature through the lens of social institutions (kinship, village structure, myth, and cosmology) and then conclude from the results that nature is a social construction or that nature and society form part of a totalizing cosmology.

Perhaps this tautology is most evident in Howell's essay, in the same volume, on the Chewong of Malaysia. He writes of how the Chewong do not recognize an opposition between the cultural and the natural (1996: 128), how the concepts of species are integral to their understandings of the social categories of Self and Other (1996: 130), and the social and moral codes that pertain to these (1996: 131). I do not in any way wish to imply that these statements are untrue. I am only suggesting that the attribution of a Chewong conflation between society and nature may be a byproduct of the methodological approach used by the researcher. As Howell states, the main sources of evidence for his claims come from cosmology as well as a, "large body

of myths and shamanistic songs, and a range of prescriptions and proscriptions, all of which inform and constitute subjectivity and social behavior" (1996: 137). What these sources share in common is that they are about the social. If they treat nature, it is therefore to be expected that they will do so in terms of its sociability.

These points are also applicable to the articles by Rival (1996) and Århem (1996). Rival begins her essay on the Huaorani of Ecuador by advocating Ingold's emphasis on practical engagements with the forest and how knowledge of that complex environment is exhaustive, non-verbal, and experientially acquired. Such engagements, as she admits, are very difficult to study: "Documenting this practical knowledge is far from easy. Informants answer questions about animal behaviour with reluctance, as if their knowledge was not verbalisable" (Rival 1996: 149). She also mentions that hunting stories are ubiquitous (1996: 149). A poetic analysis of those would certainly reveal something of the experience of a complex forest environment. Her essay, however, is not, ultimately, about this relationship. Rather, it is about two kinds of game animals (the woolly monkey and the white-lipped peccary) and the two kinds of weapons used to hunt these (blowguns and spears respectively). She uses this relationship to gain an understanding of how for the Huaorani, "society exists through its objectification of nature […] and that technology [of hunting weapons] is best understood as one of the processes by which social structures are institutionalised" (1996: 158). I do not doubt that there is great value to this study in helping us understand how the Huaorani understand their society by means of animal and hunting symbolism (as well as vice versa). My problem with this approach is that I do not understand how this relates to the complexity of forest experience. Rival does say that, in contrast to previous studies of animal symbolism which are largely representational and based on cosmology, "Huaorani technological symbolism is informed by a direct and practical relationship to the world" (Rival 1996: 161), but the relationship to that world is much more complex than the cosmological model she presents. The experience that the Huaorani have of the forest surely transcends these two animals and the weapons with which they hunt them. However, if one restricts a study to just those

weapons and animals, then it is likely that the conceptions of nature that will emerge will be limited to a certain kind of homology with society.

Århem (1996), writing of the eastern Tukanoan Makuna of Colombia, discusses how "eco-cosmology" relates to social organization. But what is the relation of that cosmology to ecological experience? As I have emphasized throughout the dissertation, the relationship between individuals and their experiences and abstract models such as cosmologies are extremely problematic, sometimes tenuous, and constantly being negotiated. A study of the "integral models of human-nature relatedness" (Århem 1996: 185) from only a cosmological perspective cannot get at how these are engaged, generated, and questioned in practice.

Social treatments of the nature question rarely deal with the messiness of experience, even though the people engaging with the forest do. People's attempts to grapple with this messiness can only be captured by getting around –for a moment– the stories that society tells itself about itself. It is not surprising that the ethnobiological approach –with all of its aforementioned problems– because of its emphasis on documenting the complexity of understandings of specific natural domains, reveals a natural world that is not fully socialized; the majority of organisms in an ecosystem do not play a role in that "totalizing" project and yet people must engage with and make sense of these on a daily basis.

Even when the natural and the social come together, this does not mean that the social in the natural is not fraught with tension. Contrary to Pálsson (1996: 66) "othering" is not limited to modernist conceptions of nature. There are many moments, as I noted throughout the dissertation, where meaning breaks down, and where beings in the forest become incomprehensibly Other and asocial.

A similar tendency to idealize the natural in the social among non-westerners is evident in Hornborg's essay: "Rather than treat plants and animals as categories of kinsmen, a society of strangers [the modern West] will breed 'natural aliens' […]. In other words, a society founded on objectification […] will tend to project the same, hierarchical subject/object dichotomy onto the

relationship between person and (natural) world" (1996: 56). Communication with animals-as-subjects does not necessarily entail that these will be treated compassionately. Indeed, as Descola (1996b) notes, the social relations with nature characteristic of some Amazonians can be predatory and non-reciprocal.

Given my insistence on developing an analysis from the level of individual experience rather than from the level of society, it is not surprising that the landscape framework –which has been so fruitful for understanding the social-nature connection in Amazonia (Gow 1995, Santos-Granero 1998)– only begins to figure prominently in the latter half of my dissertation, which is concerned with social understandings of nature. This seems indicative of the ways in which different analytical approaches point to different kinds of experiences and reflections of nature.

The final topic I wish to discuss in this section is perspectivism. I especially wish to explain why I have chosen it as one of several important frameworks of analysis in my dissertation, even if it too was developed theoretically as part of a project that is concerned primarily with "the social." Perspectivism, as Eduardo Viveiros de Castro formulates it (Viveiros de Castro 1998), grows out of his own ethnographic research on the Tupi-Guarani Araweté (Viveiros de Castro 1992). His writing on the Araweté is part of an attempt to delineate a cosmology that can account for Araweté relationships between persons and divinity as well as their conceptions of society. Perspectivism, as he proposes it (1998), has a broader scope. Namely, it is a theoretical attempt to account for a virtual pan-Amazonian preoccupation with the points of view of different kinds of beings. Many ethnographers have treated this sort of relationiality. Some of these are in ways that are somewhat different from the model he proposes (e.g., Novaes 1997), others explicitly adopt it (Conklin 2001), and many others are not stated precisely in perspectival terms but could easily be treated as such (Viveiros de Castro 1998 provides an extensive review of these latter studies).

What I find useful about perspectivism is the robustness of the model. It can accommodate a variety of relational descriptions; for example, my fifth chapter on dog dream interpreta-

tion shows how ecosemiotics and perspectivism interact. It also simply and elegantly explains much of my ethnographic material.

However, what I find problematic about the model is the way in which it is formulated entirely within the domains of society and cosmology. Viveiros de Castro admits that the model he presents is somewhat speculative and must, "still be developed by means of a plausible phenomenological interpretation of Amerindian cosmological categories" (1998: 470). I take this to mean that what he has presented at the levels of society and cosmology must be understood as a product of a form of engagement with the world that produces it. I believe that my study makes some progress towards this end. It is no accident that perspectivism seems to be associated primarily with hunters (1998: 471). This, I believe, is because it grows out of certain existential problems associated with the challenges of engaging with different kinds of beings. That it may then be developed culturally by particular peoples in ways that are sociologically and cosmologically productive –as is the case in so much of Amazonia– is in some sense derivative of this. The very real –and in some sense prior– challenge of making sense of the experience of other kinds of subjectivities is what perspectivism is fundamentally about.

# Appendix One
# Collected Plants

Common names preceded by an asterisk are not reliable.

| Family | Genus Species | Local Name | Coll. No. |
|---|---|---|---|
| Acanthaceae | | **anzuilu yuyu** | 2414 |
| Acanthaceae | | **quindi yuyu** | 2720 |
| Acanthaceae | *Aphelandra* | **amarun callu** | 2551 |
| Acanthaceae | *Fittonia albivenis* (Lindl. ex Veitch) Brummitt | **yura chini curu panga** | 1774 |
| Acanthaceae | *Justicia* | **canashi yura** | 1972 |
| Acanthaceae | *Justicia or Pseuderanthemum* | **luchuca tyumbiju** | 2052 |
| Acanthaceae | *Justicia pectoralis* Jacq. | **rumi sisa** | 2386 |
| Acanthaceae | *Kalbreyeriella rostellata* Lindau | **puru paquina muyu** | 2342 |
| Acanthaceae | *Kalbreyeriella rostellata* Lindau | **shasha panga** | 2372 |
| Acanthaceae | *Kalbreyeriella rostellata* Lindau | **sisa** | 2100 |
| Acanthaceae | *Mendoncia* | **huacu** | 1979 |
| Acanthaceae | *Mendoncia* ? | **jambatu tullu** | 2661 |
| Acanthaceae | *Pseuderanthemum* | **tamanuhua yuyu** | 2411 |
| Acanthaceae | *Ruellia colorata* Baillon | **urai curpus** | 2273 |
| Acanthaceae | *Sanchezia* | **churu tanambu** | 2330 |
| Alliaceae | *Allium* | **ichilla cibulla** | 2535 |
| Amaranthaceae | *Achyranthes aspera* L. | **cuniju quihua** | 1714 |
| Amaranthaceae | *Alternanthera* | **butunsillu** | 2434 |
| Amaryllidaceae | *Eucharis* | **sacha cibulla** | 1807 |
| Amaryllidaceae | *Eucharis amazonica* Linden ex Planchon | **sacha cebulla** | 1660 |
| Anacardiaceae | *Tapirira guianensis* Aubl. | **bahaya** | 1740 |
| Annonaceae | | **anzuilu caspi** | 1784 |
| Annonaceae | *Annona* | **chirimuya** | 2622 |
| Annonaceae | *Annona muricata* L. | **guanabana** | 2604 |
| Annonaceae | *Annona muricata* L. | [name?] | 1733 |
| Annonaceae | *Guatteria* ? | **aya cara** | 1680 |
| Annonaceae | *Guatteria* | **aya cara** | 1802 |
| Annonaceae | *Guatteria* | **aya cara** | 2168 |
| Annonaceae | *Guatteria* | **bueno yura** | 2087 |
| Annonaceae | *Guatteria* | **cara caspi** | 1882 |
| Annonaceae | *Guatteria* | **cara caspi muyu** | 2155 |
| Annonaceae | *Guatteria* ? | **cara caspi muyu** | 2202 |
| Annonaceae | *Guatteria* | **navidad cara caspi** | 2580 |
| Annonaceae | *Guatteria* | **pishcu cara caspi** | 2568 |
| Annonaceae | *Guatteria* | **urcu tia aya cara** | 2129 |
| Annonaceae | *Guatteria glaberrima* R. E. Fr. | **cara caspi** | 1730 |
| Annonaceae | *Rollinia mucosa* (Jacq.) Baill. | **anunas** | 2493 |
| Annonaceae | *Rollinia mucosa* (Jacq.) Baill. | **sacha anuna** | 2624 |
| Annonaceae | *Rollinia pittieri* Saff.? | **sacha anunas** | 1846 |
| Annonaceae? | *Unonopsis* ? | **chitata muyu, tsitata muyu** | 1839 |
| Annonaceae | *Unonopsis floribunda* Diels | **chitata cara muyu** | 2223 |
| Annonaceae | *Xylopia* | **chuspi cara caspi** | 2301 |
| Annonaceae | *Xylopia* | **uchu caspi** | 2659 |

| | | | |
|---|---|---|---|
| Apocynaceae | | **supai chuchu** | 1817 |
| Apocynaceae | | **cahuitu huasca angu** | 1919 |
| Apocynaceae | | **tuta pishcu canuhua** | 1937 |
| Apocynaceae | | **urcu bimbichu** | 2132 |
| Apocynaceae | *Aspidosperma* | **aya cara** | 2095 |
| Apocynaceae | *Aspidosperma* | **lumucha papa** | 2333 |
| Apocynaceae | *Lacmellea* | **bimbichu** | 2147 |
| Apocynaceae | *Lacmellea* | **bimbichu** | 2338 |
| Apocynaceae | *Lacmellea oblongata* Markgr. | **sacha bimbichu** | 1624 |
| Apocynaceae | *Rauvolfia* | **pishcu tsita** | 1712 |
| Apocynaceae | *Rauvolfia leptophylla* Rao | **pishcu tsita** | 2043 |
| Apocynaceae | *Tabernaemontana* | **yacu tsita** | 2272 |
| Apocynaceae | *Tabernaemontana sananho* Ruiz & Pav. | [no name] | 2084 |
| Aquifoliaceae | *Ilex guayusa* Loes. | **huayusa** | 1596 |
| Araceae | | **asnan daru** | 2438 |
| Araceae | | **buhyu panga** | 2350 |
| Araceae | | **buyu panga** | 2006 |
| Araceae | | **caca panga** | 2564 |
| Araceae | | **daru, cuchi mandi** | 2003 |
| Araceae | | **mandi** | 2175 |
| Araceae | | **pashuri mandi** | 2208 |
| Araceae | | **yuturi mandi** | 1999 |
| Araceae | *Anthurium* | **alpa panga** | 1970 |
| Araceae | *Anthurium* | **alpa panga** | 2172 |
| Araceae | *Anthurium* | **badre panga, bagri panga** | 2567 |
| Araceae | *Anthurium* | **bimbi panga** | 2085 |
| Araceae | *Anthurium* | **huaturitu panga** | 2395 |
| Araceae | *Anthurium* | **jiji panga** | 1831 |
| Araceae | *Anthurium* | **jiji panga** | 2160 |
| Araceae | *Anthurium* | **puma panga** | 2378 |
| Araceae | *Anthurium* | **raya mandi** | 2004 |
| Araceae | *Anthurium* | **rumi panga, rumi yuyu** | 2064 |
| Araceae | *Anthurium* | **shac panga** | 2425 |
| Araceae | *Anthurium* | **susu callu** | 2375 |
| Araceae | *Anthurium* | **tamanuhua callu panga** | 1765 |
| Araceae | *Anthurium ceronii* Croat sp. nov. | **bagri caracha** | 1633 |
| Araceae | *Caladium* | **machacui mandi** | 2666 |
| Araceae | *Caladium bicolor* (Aiton) Vent. | **batu** | 1996 |
| Araceae | *Caladium bicolor* (Aiton) Vent. | **caca patu** | 2442 |
| Araceae | *Colocasia* | **papa china** | 1615 |
| Araceae | *Colocasia* | **patu, chumbi mandi** | 2430 |
| Araceae | *Colocasia* | **yura mandi** | 2654 |
| Araceae | *Dieffenbachia* | **chuclla panga** | 1856 |
| Araceae | *Heteropsis ?* | **dumbiqui callu panga** | 2328 |
| Araceae | *Heteropsis* | **visura** | 1755 |
| Araceae | *Philodendron* | **ahuispa panga** | 1805 |
| Araceae | *Philodendron* | **buchi panga, buchi huasca** | 2178 |
| Araceae | *Philodendron* | **chullaca panga** | 2710 |
| Araceae | *Philodendron* | **cuichiri** | 2044 |
| Araceae | *Philodendron* | **huaturitu panga.** | 2267 |
| Araceae | *Philodendron* | **huili huasca, huili panga** | 2074 |
| Araceae | *Philodendron* | **nigri panga** | 2400 |
| Araceae | *Philodendron* | **sapu maqui panga** | 1936 |
| Araceae | *Philodendron* | **yahuati mandi** | 2433 |

| | | | |
|---|---|---|---|
| Araceae | *Philodendron* | **yana huasca mama** | 2252 |
| Araceae | *Philodendron* | **yura huasca mama** | 2261 |
| Araceae | *Xanthosoma* | **shicshi mandi** | 2048 |
| Araliaceae | *Dendropanax* | **panguiju** | 1699 |
| Araliaceae | *Dendropanax* | **rusu yura** | 2179 |
| Araliaceae | *Dendropanax arboreus* (L.) Decne. & Planch. | **rayu caspi** | 1664 |
| Araliaceae | *Schefflera morototoni* (Aubl.) Maguire, Steyerm. & Frodin | **sapallu** | 1778 |
| Araliaceae | *Schefflera morototoni* (Aubl.) Maguire, Steyerm. & Frodin | **sapallu muyu** | 2153 |
| Araliaceae | *Schefflerra diplodactyla* Harms | **maqui shalya panga** | 1949 |
| Arecaceae | | **bara** | 1888 |
| Arecaceae | | **canambo, locata, ducuta** | 2644 |
| Arecaceae | | **canambu** | 1691 |
| Arecaceae | | **cañirahua, canirahua** | 1953 |
| Arecaceae | | **pamihua** | 2556 |
| Arecaceae | | **puca sasa yuyu** | 2193 |
| Arecaceae | | **sasa yuyu** | 2184 |
| Arecaceae | *Aiphanes* | **alpalla urpi chunda** | 2717 |
| Arecaceae | *Aphandra natalia* (Balslev & An. Hend.) Barford | **silli panga** | 2164 |
| Arecaceae | *Bactris* | **urpi chunda** | 1938 |
| Arecaceae | *Desmoncus* | **antsimbara casha** | 2546 |
| Arecaceae | *Desmoncus polyacanthos* Mart. | **amarun anzuilu** | 2368 |
| Arecaceae | *Geonoma* | **alpa panga** | 2297 |
| Arecaceae | *Geonoma* | **bara chunda** | 2130 |
| Arecaceae | *Geonoma* | **bara panga** | 2547 |
| Arecaceae | *Geonoma* | **bara panga, ucsha panga** | 2537 |
| Arecaceae | *Geonoma* | **cañirahua, canirahua** | 2190 |
| Arecaceae | *Geonoma* | **ihuatzu casha, ihuasu casha, urpi chunda** | 2552 |
| Arecaceae | *Geonoma tamandua* Trail | **huacamaya panga** | 2296 |
| Arecaceae | *Hyospathe elegans* Martius | [name?] | 2068 |
| Arecaceae | *Iriartea deltoidea* Ruiz & Pav. | **patihua, pushihua, pambil** | 1686 |
| Arecaceae | *Oenocarpus mapora* H. Karst. | **shimbu, shimpo** | 1645 |
| Arecaceae | *Phytelephas tenuicaulis* (Barfod) An. Hend. | **mandari** | 1687 |
| Arecaceae | *Phytelephas tenuicaulis* (Barfod) An. Hend. | **shipati** | 2025 |
| Arecaceae | *Phytelephas tenuicaulis* (Barfod) An. Hend. | **yarina** | 2176 |
| Arecaceae | *Prestoea ensiformis* (Ruiz & Pav.) H.E. Moore | **sasa** | 1662 |
| Arecaceae | *Prestoea ensiformis* (Ruiz & Pav.) H.E. Moore | **sasa muyu yura** | 1695 |
| Arecaceae | *Prestoea schultzeana* (Burret) H.E. Moore | **puma sasa** | 2295 |
| Arecaceae | *Wettinia aequatorialis* R. Bernal | **shiquita** | 1698 |
| Arecaceae | *Wettinia maynensis* Spruce | **quirihua** | 1646 |
| Asclepiadaceae | *Asclepias curassavica* L. | **quindi sisa** | 2593 |
| Asclepiadaceae | *Metalepis albiflora* Urb. | **supai chuchu** | 2229 |
| Asteraceae | | **atun maripusa quihua** | 2428 |
| Asteraceae | | **aya huachi** | 2412 |
| Asteraceae | | **jaya panga** | 2500 |

| | | | |
|---|---|---|---|
| Asteraceae | | **mariposa quihua** | 2448 |
| Asteraceae | | **sacha ashipa** | 2443 |
| Asteraceae | *Acmella* | **puca sisa** | 2663 |
| Asteraceae | *Adenostemma fosbergii* R. M. King & H. Rob. | **mariposa quihua** | 1766 |
| Asteraceae | *Bidens* | **chupu aisana** | 2345 |
| Asteraceae | *Clibadium* | **jiji micuna panga** | 2427 |
| Asteraceae | *Clibadium* ? | **sacala tanambu** | 2354 |
| Asteraceae | *Clibadium* | **sacha shiya** | 2445 |
| Asteraceae | *Clibadium* | **tanambu** | 2137 |
| Asteraceae | *Liabum amplexicaule* Poepp. | **yacun gatun** | 1994 |
| Asteraceae | *Mikania* | **shiya** | 2701 |
| Asteraceae | *Mikania* | **yana angu** | 1857 |
| Asteraceae | *Piptocoma discolor* (Kunth) Pruski | **gatón, pihui** | 1883 |
| Asteraceae | *Vernonanthura patens* (Kunth) H. Rob. | **Busi** | 2597 |
| Balanophoraceae | *Helosis* | [no name] | 1899 |
| Begoniaceae | *Begonia* | **pangura yuyu** | 2000 |
| Begoniaceae | *Begonia* | **uchu angu** | 1968 |
| Bignoniaceae | | **jahua chiri caspi** | 1639 |
| Bignoniaceae? | | **lica huasca** | 2244 |
| Bignoniaceae | | **machacui canuhua** | 1879 |
| Bignoniaceae | | **machacui canuhua** | 2230 |
| Bignoniaceae | | **tasa huasca** | 1841 |
| Bignoniaceae | | **tuta pishcu canuhua** | 2306 |
| Bignoniaceae | | **tuta pishcu sillu** | 2207 |
| Bignoniaceae | *Arrabidaea* | **sara canuhua, añangu canuhua** | 2616 |
| Bignoniaceae | *Crescentia cujete* L. | **cucha pilchi, ichilla pilchi** | 2651 |
| Bignoniaceae | *Jacaranda copaia* (Aubl.) D. Don | **garpita yura** | 2344 |
| Bignoniaceae | *Jacaranda copaia* (Aubl.) D. Don | **lumucha caspi, lumucha yura, sisu caspi** | 1966 |
| Bignoniaceae | *Jacaranda copaia* (Aubl.) D. Don | **sesu caspi** | 1928 |
| Bignoniaceae | *Jacaranda copaia* (Aubl.) D. Don | **tuta pishcu canuhua** | 1808 |
| Bignoniaceae | *Jacaranda glabra* (DC.) Bureau & K. Schum. | **cupa panga** | 2220 |
| Bignoniaceae | *Jacaranda glabra* (DC.) Bureau & K. Schum. | **cupa panga** | 2234 |
| Bignoniaceae | *Mansoa alliacea* (Lam.) A.H. Gentry | **ajús angu, ajús huasca** | 1869 |
| Bignoniaceae | *Memora cladotricha* Sandwith | **cushnirina panga** | 1692 |
| Bignoniaceae | *Memora cladotricha* Sandwith | **maquisapa panga** | 2441 |
| Bignoniaceae | *Memora cladotricha* Sandwith | **shalya maqui panga, maquisapa paju panga** | 2540 |
| Bignoniaceae | *Memora cladotricha* Sandwith | **shalya maqui panga, munu paju panga** | 2312 |
| Bignoniaceae | *Pithecoctenium crucigerum* (L.) A. H. Gentry | **sara canuhua** | 2118 |
| Bignoniaceae | *Tabebuia chrysantha* (Jacq.) G. Nicholson | **pilchi caspi, huayacán** | 2150 |
| Bixaceae | *Bixa orellana* L. | **auca manduru** | 2595 |
| Bixaceae | *Bixa orellana* L. | **puca manduru, casha manduru** | 2612 |
| Bixaceae | *Bixa orellana* L. | **yura manduru** | 2594 |
| Bombacaceae | *Ceiba insignis* (Kunth) P.E. Gibbs & Semir | **samuna** | 1874 |
| Bombacaceae | *Ceiba samauma* (Mart.) K. Schum. | **sach'útucu, poto** | 2638 |

| | | | |
|---|---|---|---|
| Bombacaceae | *Gyranthera* sp. nov. | **camutuhua, camotohua, uma paquina muyu** | 1693 |
| Bombacaceae | *Matisia cordata* Bonpl. | **atun saputi, puca saputi, jahua saputi** | 2650 |
| Bombacaceae | *Matisia cordata* Bonpl.? | **jatun saputi, puca saputi** | 1905 |
| Bombacaceae | *Matisia obliquifolia* Standl. | **alpalla saputi** | 1876 |
| Bombacaceae | *Matisia obliquifolia* Standl. | **ichilla saputi** | 2647 |
| Bombacaceae | *Matisia obliquifolia* Standl. | **raya saputi** | 1838 |
| Bombacaceae | *Ochroma pyramidale* (Cav. ex Lam.) Urb. | **balsa** | 2418 |
| Bombacaceae | *Pachira* | **samuna** | 2713 |
| Bombacaceae | *Pachira insignis* (Sw.) Sw. ex Savigny | **lumucha inchi** | 2292 |
| Bombacaceae | *Pachira insignis* (Sw.) Sw. ex Savigny | **sicu inchi, patas inchi** | 2094 |
| Bombacaceae | *Patinoa sphaerocarpa* Cuatrecasas | **jatun saputi, puca saputi** | 2581 |
| Boraginacae | *Cordia* | **ariana caspi** | 1862 |
| Boraginaceae | *Cordia alliodora* (Ruiz & Pav.) Oken | **ingaru, uhui, misonsal, laurel** | 2706 |
| Boraginaceae | *Cordia nodosa* Lam. | **chini curu panga, ariana caspi panga** | 1623 |
| Boraginaceae | *Cordia ucayaliensis* (I.M. Johnst.) I.M. Johnst. | **huagra uvillas** | 1758 |
| Boraginaceae | *Cordia ucayaliensis* (I.M. Johnst.) I.M. Johnst. | **palta ah$^{h}$ua** | 1745 |
| Bromeliaceae | | **birdi chihuilla** | 2533 |
| Bromeliaceae | | **chunda huasca sisa** | 2016 |
| Bromeliaceae | | **huamani chihuilla** | 2029 |
| Bromeliaceae | | **quicha dunduma** | 2719 |
| Bromeliaceae | *Aechmea* | **huamani chibilla** | 1976 |
| Bromeliaceae | *Aechmea* | **machacui pita** | 1974 |
| Bromeliaceae | *Aechmea* | **pita** | 2114 |
| Bromeliaceae | *Aechmea* | **ushpa pita** | 2582 |
| Bromeliaceae | *Ananas comosus* (L.) Merr. | **puca chihuilla** | 2431 |
| Bromeliaceae | *Pitcairnia* | **chunda huasca** | 2167 |
| Bryophyte | | **unsha** | 1690 |
| Burseraceae | *Dacryodes peruviana* (Loes.) J.F. Macbr. | **cupal** | 1737 |
| Burseraceae | *Dacryodes peruviana* (Loes.) J.F. Macbr. | **cupalu, vela yura** | 1711 |
| Burseraceae | *Dacryodes peruviana* (Loes.) J.F. Macbr. | **sicun vila** | 2619 |
| Burseraceae | *Dacryodes peruviana* (Loes.) J.F. Macbr. | **uyashi** | 2405 |
| Burseraceae | *Protium?* | [name?] | 1909 |
| Burseraceae | *Protium* | **shiliquiri, curpu palu** | 1821 |
| Burseraceae | *Protium* | **uyashi muyu** | 1897 |
| Burseraceae | *Protium fimbriatum* Swart | **chiliquiri** | 2122 |
| Burseraceae | *Protium fimbriatum* Swart | **uyashi** | 2235 |
| Cactaceae | *Discocactus amazonicus* (K. Schum.) D.R. Hunt | **viñarina panga, viñari panga** | 1734 |
| Campanulaceae | *Burmeistera* | **nigri muyu panga** | 1620 |
| Campanulaceae | *Centropogon* | **jahua alpa sulima** | 2569 |
| Campanulaceae | *Centropogon capitatus Drake* | **alpa sulima, linsinguiri uma, carpintiru uma** | 1718 |
| Cannaceae | *Canna indica* L. | **ichilla ishpa muyu** | 2598 |
| Capparaceae | *Capparis* | **pungui muyu** | 1907 |
| Capparaceae | *Capparis* | **uma nanai caspi** | 2173 |
| Capparaceae | *Podandrogyne* | ***aya malagri panga** | 2520 |
| Caricaceae | *Carica microcarpa* Jacq. | **chundarucu papaya** | 2640 |
| Caricaceae | *Carica microcarpa* Jacq. | **pandu papaya** | 2367 |

| | | | |
|---|---|---|---|
| Caricaceae | *Jacartia* | **tamburu** | 1914 |
| Cecropiaceae | *Cecropia* | **chagra dundu panga** | 2709 |
| Cecropiaceae | *Cecropia* | **puca uma dundu** | 2209 |
| Cecropiaceae | *Cecropia* | **sagran dundu** | 2410 |
| Cecropiaceae | *Cecropia marginalis* Cuatrec.? | **dzilan dundu** | 2204 |
| Cecropiaceae | *Cecropia sciadophylla* Mart. | **sagran dundu** | 2106 |
| Cecropiaceae | *Coussapoa* | **ahuan dundu** | 1922 |
| Cecropiaceae | *Coussapoa* | **guilin guili, armallu uvillas** | 1860 |
| Cecropiaceae | *Coussapoa* | **urcu yura** | 1781 |
| Chrysobalanaceae | *Couepia chrysocalyx* (Poepp. & Endl.) Benth. ex Hook. f. | **chunda caspi** | 2009 |
| Chrysobalanaceae | *Couepia chrysocalyx* (Poepp. & Endl.) Benth. ex Hook. f. | **chunda caspi muyu** | 1890 |
| Chrysobalanaceae | *Couepia chrysocalyx* (Poepp. & Endl.) Benth. ex Hook. f. | **jahua chunda caspi** | 2576 |
| Chrysobalanaceae | *Couepia chrysocalyx* (Poepp. & Endl.) Benth. ex Hook. f. | **sardina cara yura** | 2151 |
| Chrysobalanaceae | *Licania* | **ardilla caspi** | 1732 |
| Chrysobalanaceae | *Licania* | **tuta pishcu huira muyu** | 2457 |
| Clusiaceae | | **pingullu caspi** | 2256 |
| Clusiaceae | | **pishcu michu** | 1933 |
| Clusiaceae | | **pungara michu** | 1903 |
| Clusiaceae | *Chrysochlamys* | **ichilla pingullu caspi** | 2331 |
| Clusiaceae | *Chrysochlamys* | **muru pingullu caspi** | 2403 |
| Clusiaceae | *Chrysochlamys* | **papali caspi** | 1836 |
| Clusiaceae | *Chrysochlamys* | **papali caspi** | 2066 |
| Clusiaceae | *Chrysochlamys* | **pingullu caspi** | 1906 |
| Clusiaceae | *Chrysochlamys* | **pingullu caspi** | 2134 |
| Clusiaceae | *Chrysochlamys bracteolata* Cuatrec. | **pingullu caspi** | 1751 |
| Clusiaceae | *Clusia* | **bisura** | 1898 |
| Clusiaceae | *Clusia* | **chunda rucu caracha panga** | 1792 |
| Clusiaceae | *Clusia* | **michu, pungara** | 1825 |
| Clusiaceae | *Clusia* | **sardina panga** | 1794 |
| Clusiaceae | *Garcinia* | **pungara** | 2374 |
| Clusiaceae | *Garcinia* | **pungara michu, michu** | 2236 |
| Clusiaceae | *Garcinia macrophylla* Mart. | **urcu pungara muyu** | 2320 |
| Clusiaceae | *Symphonia globulifera* L. f. | **birija** | 2187 |
| Clusiaceae | *Symphonia globulifera* L. f. | **caspi pungara** | 2110 |
| Clusiaceae | *Tovomita weddelliana* Planch. & Triana | **pingullu caspi** | 1954 |
| Clusiaceae | *Tovomita weddelliana* Planch. & Triana | **urcu pingullu caspi** | 2250 |
| Clusiaceae | *Vismia* | **chunda caspi** | 1945 |
| Clusiaceae | *Vismia* | **pusara manduru** | 1863 |
| Clusiaceae | *Vismia baccifera* (L.) Triana & Planch. | **pusara manduru** | 1706 |
| Clusiaceae | *Vismia sprucei* Sprague | **huangashi** | 1741 |
| Combretaceae | *Combretum* | **pahua huasca** | 2035 |
| Commelinaceae? | | **urcu mashu quihua** | 2329 |
| Commelinaceae | *Campelia* ? | **ichilla cumbu** | 2332 |
| Commelinaceae | *Dichorisandra* | **cumbu** | 1975 |
| Commelinaceae | *Dichorisandra hexandra* (Aubl.) Stand. | **yacu quilu** | 2073 |
| Commelinaceae | *Dichorsandra bonitana* Philipson | **compu** | 1763 |
| Convolvulaceae | *Ipomoea* | **cumalu** | 1786 |
| Convolvulaceae | *Ipomoea* | **cumalu huasca** | 2426 |
| Convolvulaceae | *Ipomoea* | **huagra papa** | 2483 |
| Convolvulaceae | *Ipomoea* | **puca papa** | 2413 |

| | | | |
|---|---|---|---|
| Convolvulaceae | *Ipomoea* | **yacu huasca** | 2387 |
| Convulvulaceae | *Ipomoea* | **changa tullu nanai panga** | 1929 |
| Convulvulaceae | *Ipomoea batatas* (L.) Lam. | **papa** | 1616 |
| Costaceae | *Costus* | **puca chihuilla** | 2511 |
| Costaceae | *Costus* | **ushpa chihuilla, caña agria** | 2300 |
| Cucurbitaceae | | **machacui huasca** | 2091 |
| Cucurbitaceae | | **mangu cucuna** | 1915 |
| Cucurbitaceae | | **narái** | 2096 |
| Cucurbitaceae | | **sacha sapallu** | 2423 |
| Cucurbitaceae | | **sapallu** | 2714 |
| Cucurbitaceae | | **tacu** | 1592 |
| Cucurbitaceae | *Cayaponia* | **jaya muyu** | 2653 |
| Cucurbitaceae | *Cayaponia* | **machacui ata** | 2349 |
| Cucurbitaceae | *Cayaponia macrocalyx* Harms | **yarina** | 1657 |
| Cucurbitaceae | *Fevillea* ? | **ucucha ata, ata** | 2232 |
| Cucurbitaceae | *Gurania* | **mangu cucuna** | 2011 |
| Cucurbitaceae | *Gurania* | **shicshi huasca** | 2012 |
| Cucurbitaceae | *Gurania spinulosa* (Poepp. & Endl.) Cogn. | **sacha sapallu** | 2450 |
| Cucurbitaceae | *Luffa cylindrica* (L.) M. Roem. | **tacu** | 1606 |
| Cucurbitaceae | *Momordica charantia* L. | **lagartu muyu** | 2607 |
| Cucurbitaceae | *Sechium edule* (Jacq.) Sw. | **achucha** | 2609 |
| Cyclanthaceae | *Cyclanthus bipartitus* Poit. | **laurya panga** | 2109 |
| Cyclanthaceae | *Ludovia integrifolia* (Woodson) Harling | **lluchuca huasca** | 2117 |
| Cyclanthaceae | *Thoracocarpus bissectus* (Vell.) Harling | **ashanga huasca** | 2237 |
| Cyperaceae | *Cyperus* | **alpalla dunduma** | 2608 |
| Cyperaceae | *Cyperus* | **dunduma quihua** | 2429 |
| Cyperaceae | *Cyperus* | **jahuan dunduma quihua** | 2590 |
| Cyperaceae | *Eleocharis elegans* (Kunth) Roem. & Schult. | **dunduma** | 2512 |
| Cyperaceae | *Eleocharis elegans* (Kunth) Roem. & Schult. | **rupai dunduma** | 2432 |
| Cyperaceae | *Rhynchospora* | **pishcu dunduma, pishcun dunduma** | 2722 |
| Cyperaceae | *Scleria melaleuca* Rchb. ex Schltdl. & Cham. | **cuchillu huasca** | 2083 |
| Dichapetalaceae | *Tapura peruviana* K. Krause | **alpa putsucu muyu** | 1822 |
| Dilleniaceae | *Doliocarpus dentatus* (Aubl.) Standl. | **saca saca** | 1948 |
| Dilleniaceae | *Neodillenia coussapoana* Aymard | **chunda saputi** | 1828 |
| Ebenaceae | *Diospyros sericea* A. DC. | **quiru nanai panga** | 1641 |
| Elaeocarpaceae | *Sloanea* | **casha caspi** | 1815 |
| Elaeocarpaceae | *Sloanea* | **casha caspi muyu** | 2161 |
| Elaeocarpaceae | *Sloanea* | **chunda rucu uvillas aula** | 2158 |
| Elaeocarpaceae | *Sloanea* | **manduru caspi** | 1833 |
| Elaeocarpaceae | *Sloanea fragrans* Rusby | **manduru caspi** | 2104 |
| Ericaceae? | | **besura** | 1744 |
| Ericaceae | *Psammisia* | **bisura panga** | 2264 |
| Ericaceae | *Psammisia* ? | **challuhuan bisu** | 2366 |
| Ericaceae | *Psammisia* | **yavisu panga** | 1619 |
| Ericaceae | *Psammisia pauciflora* Griseb. ex A.C. Smith | **pichilla huasca angu** | 1670 |
| Erythroxylaceae | *Erythroxylum macrophyllum* Cav. | **chaquiri panga** | 2027 |
| Erythroxylaceae | *Erythroxylum macrophyllum* Cav. var. *macrophyllum* | **pandu paju yura** | 1983 |
| Euphorbiaceae | | **sacha mani** | 1824 |

| | | | |
|---|---|---|---|
| Euphorbiaceae | *Acalypha* | **panguiju** | 2542 |
| Euphorbiaceae | *Alchornea* | **mandari ushpa muyu** | 2380 |
| Euphorbiaceae | *Alchornea* | **ushpa muyu** | 1885 |
| Euphorbiaceae | *Cadiaeum* ? | **gustana panga** | 2702 |
| Euphorbiaceae | *Caryodendron orinocense* H. Karst. | **cuchi inchi, carayu inchi** | 2211 |
| Euphorbiaceae | *Caryodendron orinocense* H. Karst. | **sacha mani** | 2649 |
| Euphorbiaceae | *Hyeronima* | **sacha abiyu** | 1886 |
| Euphorbiaceae | *Hyeronima* | **tacana mati cara** | 2037 |
| Euphorbiaceae | *Hyeronima alchorneoides* Allemão | **arahuata sara** | 2573 |
| Euphorbiaceae | *Hyeronima alchorneoides* Allemão | **rusu caspi** | 2146 |
| Euphorbiaceae | *Mabea* | **challua inchi** | 2123 |
| Euphorbiaceae | *Mabea* | **chucula caspi** | 2325 |
| Euphorbiaceae | *Mabea* | **sacha cumalu** | 1791 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **accha lumu** | 2180 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **accha lumu** | 2477 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **achuhua lumu** | 2471 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **aya lumu, birdi lumu** | 2468 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **birdi panga lumu** | 2470 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **birdi panga lumu** | 2478 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **capichuyu lumu** | 2479 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **chaquisca lumu** | 2465 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **huacamaya lumu** | 2481 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **ichilla lumu** | 1767 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **ichilla lumu** | 2464 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **jahua lumu** | 2480 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **laya lumu, yacu lumu** | 2467 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **machai lumu** | 2476 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **muyu lumu** | 2474 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **pata mucu lumu** | 2482 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **puca cara lumu** | 2472 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **sandyau lumu** | 2473 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **sinchi yura lumu, juaquina lumu** | 2490 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **ushpa panga lumu** | 2466 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **yana lumu** | 2469 |
| Euphorbiaceae | *Manihot esculenta* Crantz | **yura lumu** | 2475 |
| Euphorbiaceae | *Phyllanthus* | **quibilín** | 2447 |
| Euphorbiaceae | *Phyllanthus* | **yacu tanambu** | 2712 |
| Euphorbiaceae? | *Plukenetia* ? | **huira muyu** | 2097 |
| Euphorbiaceae | *Plukenetia* | **huira muyu, jatun ticasu** | 2233 |
| Euphorbiaceae | *Plukenetia cf. volubilis* L. | **quindi muyu** | 2188 |
| Euphorbiaceae | *Sapium* | **cauchu** | 1960 |
| Euphorbiaceae | *Sapium* | **upa cauchu** | 2324 |
| Euphorbiaceae | *Senefeldera* | **masuni** | 1854 |
| Euphorbiaceae | *Senefeldera inclinata* Müll. Arg | **papali caspi** | 2199 |
| Euphorbiaceae | *Senefeldera inclinata* Müll. Arg | **rayu caspi** | 1798 |
| Euphorbiaceae | *Senefeldera inclinata* Müll. Arg | **sagra muyu** | 1935 |
| Euphorbiaceae | *Tetrorchidium* ? | **lanza caspi** | 2243 |
| Euphorbiaceae | *Tetrorchidium macrophyllum* Müll. Arg. | **mauca yura** | 2398 |
| Fabaceae-Caesalpinioideae | *Bauhinia guianensis* Aubl. | **apustul angu** | 1963 |
| Fabaceae-Caesalpinioideae | *Browneopsis ucayalina* Huber | **cruz caspi, curuz caspi** | 2723 |
| Fabaceae-Caesalpinioideae | *Cassia cowanii* H.S. Irwin & Barneby | **urcu pacai, canishtula pacai** | 2648 |
| Fabaceae-Caesalpinioideae | *Macrolobium angustifolium* (Benth.) R.S. Cowan | **ñabi muyu pacai** | 2636 |

| | | | |
|---|---|---|---|
| Fabaceae-Caesalpinioideae | *Schizolobium parahyba* (Vell.) S.F. Blake | **culqui caspi** | 2093 |
| Fabaceae-Caesalpinioideae | *Schizolobium parahyba* (Vell.) S.F. Blake | **culqui caspi** | 2451 |
| Fabaceae-Caesalpinioideae | *Senna* | **gaitari angu** | 1916 |
| Fabaceae-Caesalpinioideae | *Senna bacillaris* (L. f.) H.S. Irwin & Barneby | **quillu sisa** | 1658 |
| Fabaceae-Caesalpinioideae | *Senna bacillaris* (L. f.) H.S. Irwin & Barneby | **virgin mama sisa** | 2116 |
| Fabaceae-Faboideae | | **auca ambi** | 1589 |
| Fabaceae-Faboideae | | **shiquitu jambi** | 1588 |
| Fabaceae-Faboideae | *Andira inermis* (W. Wright) Kunth ex. DC. | **cuchi purutu** | 2313 |
| Fabaceae-Faboideae | *Clitoria* | **tangurahua** | 1782 |
| Fabaceae-Faboideae | *Crotolaria nitens* Kunth | **challua putu yura** | 1659 |
| Fabaceae-Faboideae | *Desmodium* | **cuica panga** | 2107 |
| Fabaceae-Faboideae | *Desmodium* | **mashu purutu quihua** | 2589 |
| Fabaceae-Faboideae | *Dioclea* | **lica huasca** | 2186 |
| Fabaceae-Faboideae | *Dioclea* ? | **tangurahua** | 1921 |
| Fabaceae-Faboideae | *Dussia tessmannii* Harms | **jambi caspi** | 2707 |
| Fabaceae-Faboideae | *Erythrina amazonica* Krukoff | **tangui** | 1665 |
| Fabaceae-Faboideae | *Indigofera suffruticosa* Mill. | **tinda** | 2381 |
| Fabaceae-Faboideae | *Lonchocarpus* | **auca jambi** | 2263 |
| Fabaceae-Faboideae | *Lonchocarpus utilis* A.C. Sm. | **jatun jambi** | 2302 |
| Fabaceae-Faboideae | *Lonchocarpus utilis* A.C. Sm. | **sacha jambi** | 1632 |
| Fabaceae-Faboideae | *Lonchocarpus utilis* A.C. Sm. | **shiquitu ambi** | 2060 |
| Fabaceae-Faboideae | *Machaerium* | **urcu illahuanga pacai** | 2133 |
| Fabaceae-Faboideae | *Machaerium cuspidatum* Kuhlm. & Hoehne | **indillama angu** | 1988 |
| Fabaceae-Faboideae | *Machaerium cuspidatum* Kuhlm. & Hoehne | **indillama huasca, indillama angu** | 2544 |
| Fabaceae-Faboideae | *Mucuna rostrata* Benth. | **lica huasca** | 2057 |
| Fabaceae-Faboideae | *Myroxylon balsamum* (L.) Harms | **balsamo** | 2602 |
| Fabaceae-Faboideae | *Ormosia* | **chucu muyu, huairuru** | 2615 |
| Fabaceae-Faboideae | *Pterocarpus* | **ingaru yahuar huiqui** | 2486 |
| Fabaceae-Mimosoideae | *Abarema laeta* (Benth.) Barneby & J.W. Grimes | **chundarucu panga** | 2166 |
| Fabaceae-Mimosoideae | *Albizia niopoides* (Spruce ex Benth.) Burkart | **mangu caspi** | 2596 |
| Fabaceae-Mimosoideae | *Calliandra trinervia* Benth. | **sacha yutsu** | 1719 |
| Fabaceae-Mimosoideae | *Cedrelinga cateniformis* (Ducke) Ducke | **chunchu** | 2241 |
| Fabaceae-Mimosoideae | *Cedrelinga cateniformis* (Ducke) Ducke | **chunchu** | 2716 |
| Fabaceae-Mimosoideae | *Cedrelinga cateniformis* (Ducke) Ducke | **chunchu muyu** | 1813 |
| Fabaceae-Mimosoideae | *Inga* | **birdi cara pacai** | 2307 |
| Fabaceae-Mimosoideae | *Inga* | **canashi pacai** | 1708 |
| Fabaceae-Mimosoideae | *Inga* | **challuhua pacai** | 1754 |
| Fabaceae-Mimosoideae | *Inga* | **cutu pacai** | 2280 |
| Fabaceae-Mimosoideae | *Inga* | **machite machin manga yura** | 1667 |
| Fabaceae-Mimosoideae | *Inga* | **machituna** | 1710 |
| Fabaceae-Mimosoideae | *Inga* | **ñabi muyu pacai** | 1901 |
| Fabaceae-Mimosoideae | *Inga* | [name?] | 1723 |
| Fabaceae-Mimosoideae | *Inga* | **pascua pacai** | 1847 |
| Fabaceae-Mimosoideae | *Inga* | **pascua pacai** | 2148 |
| Fabaceae-Mimosoideae | *Inga* | **pascua pacai** | 2154 |
| Fabaceae-Mimosoideae | *Inga* | **pungui pacai** | 2185 |
| Fabaceae-Mimosoideae | *Inga* | **tanaqui** | 1643 |

| | | | |
|---|---|---|---|
| Fabaceae-Mimosoideae | *Inga* | **urcu pacai** | 2039 |
| Fabaceae-Mimosoideae | *Inga* | **ushicu pacai** | 1803 |
| Fabaceae-Mimosoideae | *Inga* | **yahuati pacai** | 2144 |
| Fabaceae-Mimosoideae | *Inga alba* (Sw.) Willd. | **puca pacai** | 1748 |
| Fabaceae-Mimosoideae | *Inga alba* (Sw.) Willd. | **puca pacai** | 2634 |
| Fabaceae-Mimosoideae | *Inga bourgonii* (Aubl.) DC. | **sacha pacai** | 1614 |
| Fabaceae-Mimosoideae | *Inga capitata* Desv. | **chorongo pacai** | 1735 |
| Fabaceae-Mimosoideae | *Inga capitata* Desv. | **cushini pacai, aya pacai** | 1849 |
| Fabaceae-Mimosoideae | *Inga ciliata* C. Presl subsp. *subpicata* T.D. Penn | **cushini pacai** | 1622 |
| Fabaceae-Mimosoideae | *Inga ciliata* C. Presl subsp. *subpicata* T.D. Penn | **cushini panga** | 2517 |
| Fabaceae-Mimosoideae | *Inga ciliata* C. Presl subsp. *subpicata* T.D. Penn | **shinguilli pacai** | 1701 |
| Fabaceae-Mimosoideae | *Inga cordatoalata* Ducke | [name?] | 2125 |
| Fabaceae-Mimosoideae | *Inga marginata* Willd. | **chichicu pacai** | 2081 |
| Fabaceae-Mimosoideae | *Inga marginata* Willd. | **ushicu pacai** | 2614 |
| Fabaceae-Mimosoideae | *Inga ruiziana* G. Don | **quillu pacai, yacu pacai** | 1594 |
| Fabaceae-Mimosoideae | *Inga ruiziana* G. Don | **yahuati pacai** | 1726 |
| Fabaceae-Mimosoideae | *Inga sapindoides* Willd. | **birdi cara pacai** | 2390 |
| Fabaceae-Mimosoideae | *Inga velutina* Willd. | **cutu pacai** | 2031 |
| Fabaceae-Mimosoideae | *Mimosa* | **yana quiru casha** | 2393 |
| Fabaceae-Mimosoideae | *Parkia* | **illahuanga pacai** | 2019 |
| Fabaceae-Mimosoideae | *Parkia balslevii* H.C. Hopkins | **ullahuanga pacai** | 2240 |
| Fabaceae-Mimosoideae | *Parkia balslevii* H.C. Hopkins | **ullahuanga pacai** | 2618 |
| Fabaceae-Mimosoideae | *Parkia multijuga* Bentham | **cutanga** | 1809 |
| Fabaceae-Mimosoideae | *Parkia multijuga* Bentham ? | **cutanga** | 1868 |
| Fabaceae-Mimosoideae | *Piptadenia uaupensis* Spruce ex Benth. | **puca casha huasca** | 2323 |
| Fabaceae-Mimosoideae | *Stryphnodendron porcatum* D.A. Neill & Occhioni f. | **tanachi** | 1756 |
| Fabaceae-Mimosoideae | *Stryphnodendron porcatum* D. A. Neill & Occhioni f. | **tanachi, huaranga** | 1705 |
| Fabaceae-Mimosoideae | *Zygia* | **puca pacai** | 2242 |
| Fabaceae-Mimosoideae | *Zygia longifolia* (Humb. & Bonpl. ex Willd.) Britton & Rose | **yacu yutsu** | 2444 |
| Flacourtiaceae | *Casearia* | **alpalla ardilla caspi** | 2030 |
| Flacourtiaceae | *Casearia* | **putsucu muyu panga** | 2516 |
| Flacourtiaceae | *Casearia* | **simisya muyu, alpalla rumi caspi** | 2293 |
| Flacourtiaceae | *Casearia* | **tsiri tsiri** | 2715 |
| Flacourtiaceae | *Casearia* | **uma paquina muyu** | 2258 |
| Flacourtiaceae | *Casearia arborea* (Rich.) Urb. | **name?** | 1750 |
| Flacourtiaceae | *Casearia fasciculata* (Ruiz & Pav.) Sleumer | **chupu muyu** | 1675 |
| Flacourtiaceae | *Hasseltia floribunda* Kunth | **quiru panga** | 1980 |
| Flacourtiaceae | *Mayna odorata* Aubl. | **saqui** | 2170 |
| Flacourtiaceae | *Mayna odorata* Aubl. | **tsunsu panga yura** | 1684 |
| Flacourtiaceae | *Tetrathylacium macrophyllum* Poepp. | **hualca yura** | 1855 |
| Flacourtiaceae | *Tetrathylacium macrophyllum* Poepp. | **jahua sulima** | 2566 |
| Flacourtiaceae | *Tetrathylacium macrophyllum* Poepp. | **maqui huatana muyu** | 2309 |
| Gesneriaceae | | **acangahua panga** | 1577 |
| Gesneriaceae | | **ahuitya panga** | 2518 |
| Gesneriaceae | | **paushi yuyu** | 2496 |
| Gesneriaceae | | **puca panga** | 2054 |

| | | | |
|---|---|---|---|
| Gesneriaceae | | **puca puma callu panga** | 2498 |
| Gesneriaceae | | **puca puma callu panga** | 2532 |
| Gesneriaceae | | **quillu huiqui, sulima** | 2225 |
| Gesneriaceae | | **racu yuyu** | 2446 |
| Gesneriaceae | | **sacha tahuacu** | 2045 |
| Gesneriaceae | *Alloplectus* | **tisicu panga** | 1926 |
| Gesneriaceae | *Besleria aggregata* (Mart.) Hanst. | **tucsi panga** | 1753 |
| Gesneriaceae | *Columnea* | **paña panga** | 1721 |
| Gesneriaceae | *Columnea* | **puca panga** | 1679 |
| Gesneriaceae | *Columnea ericae* Mansf. | **virgin mama sisa** | 1673 |
| Gesneriaceae | *Columnea tenensis* (Wiehler) B. D. Morley | **paña panga** | 1955 |
| Gesneriaceae | *Columnea tenensis* (Wiehler) B.D. Morley | **paña panga aula** | 2067 |
| Gesneriaceae | *Corytoplectus* | **puca panga** | 1931 |
| Gesneriaceae | *Drymonia* | **alcu chuchu** | 2005 |
| Gesneriaceae | *Drymonia* | **atalpa crista** | 2370 |
| Gesneriaceae | *Drymonia* | **cacatao panga** | 2460 |
| Gesneriaceae | *Drymonia* | **mayanchi panga** | 2508 |
| Gesneriaceae | *Drymonia* | **ñabi chini curu panga** | 2098 |
| Gesneriaceae | *Drymonia* | **quillu caracha panga** | 1747 |
| Gesneriaceae | *Drymonia affinis* (Mans.) Wiehler | **cacatao** | 1653 |
| Gesneriaceae | *Drymonia affinis* (Mans.) Wiehler | **cacatao** | 1654 |
| Gesneriaceae | *Drymonia brochidodroma* Wiehler | **chiri caspi** | 1617 |
| Gesneriaceae | *Drymonia coccinea* (Aubl.) Wiehler | **cacatao panga** | 1672 |
| Gesneriaceae | *Drymonia pendula* (Poepp.) Wiehler | **cacatao** | 1800 |
| Gesneriaceae | *Gasteranthus* | **alpa panga** | 2065 |
| Gesneriaceae | *Gloxinia* | **sarsillu** | 2704 |
| Gesneriaceae | *Pearcea rhodotricha* (Cuatrec.) L.P. Kvist & L.E. Skog | **tsuntsu panga** | 2703 |
| Haemodoraceae | *Xiphidium caeruleum* Aublet | **chahuara, sacha chahuara** | 2391 |
| Haemodoraceae | *Xiphidium caeruleum* Aublet | **llausa yuyu** | 1998 |
| Heliconiaceae | *Heliconia* | **jatun lumu maca** | 2341 |
| Heliconiaceae | *Heliconia* | **lliquirisiqui paririhua** | 2711 |
| Heliconiaceae | *Heliconia aemygdiana* Burle-Marx | **sacha paririhua, irqui paririhua** | 2080 |
| Heliconiaceae | *Heliconia chartacea* Lane ex Barreiros | **huacaisiqui paririhua** | 2541 |
| Heliconiaceae | *Heliconia standleya* J.F. Macbr. | **yana paririhua** | 2105 |
| Heliconiaceae | *Heliconia stricta* Huber | **paririhua** | 2305 |
| Hernandiaceae | *Sparattanthelium* | **dunduma huasca** | 2177 |
| Hippocastanaceae | *Billia columbiana* Planch. & Linden ex Triana & Planch. | **curupa** | 1991 |
| Hippocastanaceae | *Billia columbiana* Planch. & Linden ex Triana & Planch. | **curupa** | 2198 |
| Hippocastanaceae | *Billia columbiana* Planch. & Linden ex Triana & Planch. | **paña caspi yura** | 2020 |
| Hippocastanaceae | *Billia columbiana* Planch. & Linden ex Triana & Planch. | **paña yura** | 1666 |
| Hippocrateaceae | *Salacia* | **paju caspi** | 2021 |
| Hippocrateaceae | *Salacia macrantha* A.C. Sm. | **chundarucu uvillas** | 1887 |
| Hippocrateaceae | *Salacia macrantha* A.C. Sm. | **mono paju panga** | 1573 |
| Hippocrateaceae? | *Tontelea* ? | **cushini huasca** | 1934 |
| Icacinaceae | | **pungui muyu** | 1586 |
| Icacinaceae | *Calatola* | **tutayu** | 2219 |
| Icacinaceae | *Citronella incarum* (J.F. Macbr.) R.A. Howard | **caca mishqui cara** | 2200 |

| | | | |
|---|---|---|---|
| Icacinaceae | *Metteniusa tessmanniana* (Sleumer) Sleumer | **mani** | 2102 |
| Icacinaceae | *Metteniusa tessmanniana* (Sleumer) Sleumer | **mani** | 2103 |
| Lamiaceae? | | **huacu** | 1759 |
| Lamiaceae | | **lumu quipu** | 2631 |
| Lamiaceae | | **upa yuyu** | 2506 |
| Lamiaceae | *Scutellaria coccinea* Kunth | **asi sisa** | 1720 |
| Lauraceae | | **quillu ajua** | 1688 |
| Lauraceae? | | **yura tambilu** | 2454 |
| Lauraceae | *Chlorocardium venenosum* (Kost. & Pinck.) Rohw., H.G. Richt & van der Werff. | **jambi muyu panga** | 1977 |
| Lauraceae | *Cinnamomum* | **lluchuca caspi panga, lluchica caspi panga** | 2462 |
| Lauraceae | *Ocotea* | **ishpingu aula** | 2578 |
| Lauraceae` | *Ocotea* | **quillu ah$^{h}$ua** | 2579 |
| Lauraceae | *Ocotea* | **quillu caspi** | 2099 |
| Lauraceae | *Ocotea* | **sindi, sacha sindi** | 2617 |
| Lauraceae | *Ocotea* | **yana ah$^{h}$ua, canelo negro** | 2143 |
| Lauraceae | *Ocotea aciphylla* (Nees) Mez | **ishpingu aula** | 2218 |
| Lauraceae | *Ocotea javitensis* (Kunth) Pittier | **pahua palta** | 2149 |
| Lauraceae | *Ocotea quixos* (Lam.) Kosterm. | **ishpingu** | 2645 |
| Lauraceae | *Persea* | **sicu palta** | 2373 |
| Lecythidaceae | | **curu muyu** | 2203 |
| Lecythidaceae | *Eschweilera* | **alpalla puma caspi** | 2266 |
| Lecythidaceae | *Eschweilera* | **machin manga** | 1812 |
| Lecythidaceae | *Eschweilera* | **puma caspi** | 2194 |
| Lecythidaceae | *Eschweilera* | **puma caspi muyu** | 2131 |
| Lecythidaceae | *Eschweilera* | **supai mati muyu** | 2059 |
| Lecythidaceae | *Gustavia longifolia* Poepp. ex Berg | **supai pasu** | 2214 |
| Lecythidaceae | *Gustavia macarenensis* Philipson | **pasu** | 1827 |
| Lecythidaceae | *Lecythis zabucaja* Aubl.? | **machin manga** | 2363 |
| Liliaceae | | **lumucha ajus** | 2484 |
| Liliaceae | *Smilax* | **huagra casha** | 2254 |
| Liliaceae | *Smilax* | **palu casha** | 2549 |
| Loganiaceae | *Strychnos* | **jambi yura** | 2379 |
| Loganiaceae | *Strychnos ecuadoriensis* Krukoff & Barneby | **yana caspi, yana angu** | 2336 |
| Loranthaceae | | **gaitari muyu angu** | 1947 |
| Loranthaceae | | **urcu munani** | 2124 |
| Loranthaceae | *Oryctanthus alveolatus* (Kunth) Kuijt | **munani** | 1722 |
| Lythraceae | *Cuphea* | **rumi sisa, rumi panga** | 2529 |
| Lythraceae | *Cuphea* | **yacu sasa** | 1993 |
| Lythraceae | *Cuphea* | **yacu sasa yura** | 1997 |
| Malpighiaceae | | **ingandu** | 1661 |
| Malpighiaceae | | **sacha yaji** | 1600 |
| Malpighiaceae? | | **yacu sindi** | 2274 |
| Malpighiaceae | *Banisteriopsis* | **quingu yuyu** | 2708 |
| Malpighiaceae | *Bunchosia argentea* (Jacq.) DC. | **cumalu muyu** | 2227 |
| Malpighiaceae | *Byrsonima putumayensis* Cuatrec. | **churu uvillas** | 1942 |
| Malvaceae | *Abelmoschus moschatus* Medik. | **mishqui muyu** | 1610 |
| Malvaceae | *Gossypium barbadense* L. | **algurun** | 1608 |
| Malvaceae | *Pavonia* | **culumbya quihua** | 2571 |

| | | | |
|---|---|---|---|
| Malvaceae | *Sida* ? | **pichanga** | 2489 |
| Marantaceae | *Calathea* | **biju panga** | 2138 |
| Marantaceae | *Calathea* | **bullus panga** | 2657 |
| Marantaceae | *Calathea* | **muti panga** | 2656 |
| Marantaceae | *Calathea* | **paya panga** | 2404 |
| Marantaceae | *Calathea* | **portica panga** | 2655 |
| Marantaceae | *Calathea* | **rayu panga** | 2275 |
| Marantaceae | *Calathea* | **turu panga** | 2139 |
| Marantaceae | *Calathea altissima* (Poepp. & Endl.) Körn. | **huili panga** | 1689 |
| Marantaceae | *Calathea crotalifera* Watson | **chagra panga** | 2536 |
| Marantaceae | *Calathea lagoagriana* H. Kenn. | **huishtu ñabi panga** | 2575 |
| Marantaceae | *Calathea lanicaulis* H. Kenn. | **tsitsin panga** | 2340 |
| Marantaceae | *Ischnosiphon* | **huili tullu panga** | 2061 |
| Marantaceae | *Ischnosiphon* | **irqui huili panga** | 2401 |
| Marantaceae | *Ischnosiphon* | **suru** | 2050 |
| Marcgraviaceae | *Marcgravia* | **michu** | 1881 |
| Marcgraviaceae | *Marcgravia* ? | [name not known] | 1618 |
| Marcgraviaceae | *Marcgravia brownei* (Triana & Planch.) Krug & Urb. | **mashu huasca, huachi huasca** | 1736 |
| Melastomataceae | | **gunuhuara caspi, gunuhuaru** | 1580 |
| Melastomataceae | | **sajuan anduchi caspi** | 2283 |
| Melastomataceae | *Arthrostemma ciliatum* Pav. ex D. Don | **capihuara sisa** | 2437 |
| Melastomataceae | *Bellucia pentamera* Naudin | **quisa muyu, tisa muyu** | 2572 |
| Melastomataceae | *Bellucia pentamera* Naudin | **tisa muyu** | 1843 |
| Melastomataceae | *Blakea* | **ahua dunuju** | 2145 |
| Melastomataceae | *Blakea* | **pishcu dunuju** | 2270 |
| Melastomataceae | *Blakea repens* (Ruiz & Pav.) D. Don | **dunuju** | 1717 |
| Melastomataceae | *Clidemia* | ***quiruyu panga** | 2528 |
| Melastomataceae | *Clidemia heterophylla* (Desr.) Gleason | **alpalla tuta pishcu lumu** | 2456 |
| Melastomataceae | *Clidemia heterophylla* (Desr.) Gleason | **tuta pishcu lumu** | 1671 |
| Melastomataceae | *Clidemia heterophylla* (Desr.) Gleason | **tuta pishcu lumu** | 1772 |
| Melastomataceae | *Clidemia heterophylla* (Desr.) Gleason | **urcu pishcu muyu** | 2291 |
| Melastomataceae | *Henriettella sylvestris* Gleason | **uchupa caspi** | 2141 |
| Melastomataceae | *Miconia* | **alpalla dunuju, alpallan dunuju** | 2565 |
| Melastomataceae | *Miconia* | **anduchi caspi** | 1655 |
| Melastomataceae | *Miconia* | **anduchi caspi** | 2224 |
| Melastomataceae | *Miconia* | **anduchi caspi, pishcu muyu** | 1867 |
| Melastomataceae | *Miconia* | **armadillu panga** | 2013 |
| Melastomataceae | *Miconia* | **armallu panga** | 1773 |
| Melastomataceae | *Miconia* | **armallu panga** | 2055 |
| Melastomataceae | *Miconia* | **chunda caspi panga** | 2499 |
| Melastomataceae | *Miconia* | **pishcu muyu** | 1609 |
| Melastomataceae | *Miconia* | **ushpa anduchi caspi, mauca caspi** | 1920 |
| Melastomataceae | *Miconia* | **ushpa caspi** | 1884 |
| Melastomataceae | *Miconia* | **yana muyu aula** | 2369 |
| Melastomataceae | *Miconia* | **yura panga anduchi caspi** | 2409 |
| Melastomataceae | *Monolena primulaeflora* Hook f. | **quiru nanai panga** | 1674 |
| Melastomataceae | *Monolena primulaeflora* Hook f. | **quiru panga** | 2562 |
| Melastomataceae | *Tococa chuivensis* Wurdack | **ahua tuta pishcu lumu** | 2455 |
| Meliaceae | | **cuquindu** | 1582 |
| Meliaceae | *Cabralea canjerana* (Vell.) Mart. | **batea** | 2660 |

| | | | |
|---|---|---|---|
| Meliaceae | *Cabralea canjerana* (Vell.) Mart. | **batea muyu** | 2023 |
| Meliaceae | *Cedrela odorata* L. | **cedru** | 2288 |
| Meliaceae | *Guarea* | **billacu** | 1911 |
| Meliaceae | *Guarea* | **billacu caspi** | 2007 |
| Meliaceae | *Guarea kunthiana* A. Juss. | **Cuquindu, acha caspi cuquindu** | 1702 |
| Meliaceae | *Guarea macrophylla* Vahl | **alpalla ducuta, alpallan ducuta, ichilla ducuta, ichillan ducuta** | 2563 |
| Meliaceae | *Guarea macrophylla* Vahl | **ducuta** | 2053 |
| Meliaceae | *Guarea macrophylla* Vahl. subsp. *pendulispica* (C.DC.) T.D. Penn | **ducuta** | 1961 |
| Meliaceae | *Guarea silvatica* C. DC. | **acha cuquindu** | 1648 |
| Meliaceae | *Guarea silvatica* C. DC. | ***birdi huacamaya panga** | 2526 |
| Meliaceae | *Guarea silvatica* C. DC. | **coquindu** | 1685 |
| Meliaceae | *Trichilia* | **masuni muyu** | 1816 |
| Meliaceae | *Trichilia* | **palu caspi** | 2452 |
| Meliaceae | *Trichilia* | **sagra masuni** | 1866 |
| Meliaceae | *Trichilia laxipaniculata* Cuatrec. | **billacu yura** | 1850 |
| Menispermaceae | | **ucucha aya huasca** | 2040 |
| Menispermaceae? | | **yana caspi, yana angu** | 2281 |
| Menispermaceae | *Abuta* | **pahua huasca angu** | 2334 |
| Menispermaceae | *Abuta* | **quillu angu** | 2548 |
| Menispermaceae | *Abuta grandifolia* (Mart.) Sandwith | **sicutara** | 1630 |
| Menispermaceae | *Cissampelos laxiflora* Moldenke | **uma nanai panga** | 1771 |
| Menispermaceae | *Cissampelos pareira* L. | **tiricu panga** | 1962 |
| Monimiaceae | | **irqui chiri caspi** | 1571 |
| Monimiaceae | *Mollinedia* | **ariana caspi** | 2076 |
| Monimiaceae | *Mollinedia* | **jahua chiri caspi** | 1832 |
| Monimiaceae | *Siparuna* | **armallu asna muyu** | 1951 |
| Monimiaceae | *Siparuna* | **chaquisca panga** | 2422 |
| Monimiaceae | *Siparuna* | **limun panga** | 2392 |
| Monimiaceae | *Siparuna* | **limun yura** | 2001 |
| Monimiaceae | *Siparuna* | [name?] | 1570 |
| Monimiaceae | *Siparuna* | **sacha huayusa** | 1875 |
| Monimiaceae | *Siparuna harlingii* S.S. Renner & Hausner | **malagri panga** | 1716 |
| Monimiaceae | *Siparuna macrotepala* Perkins | **asna panga** | 1631 |
| Moraceae | | **biriya** | 2282 |
| Moraceae | | **huayaca muyu, huayacán** | 1796 |
| Moraceae | | **sambi caspi** | 2543 |
| Moraceae | *Artocarpus altilis* (Parkinson) Fosberg | **paparahua** | 2668 |
| Moraceae | *Batocarpus costaricensis* Standl. & L.O. Williams | **ardilla paparahua** | 2637 |
| Moraceae | *Batocarpus costaricensis* Standl. & L.O. Williams | **chunda paparahua, sicsi paparahua** | 2583 |
| Moraceae | *Batocarpus orinocensis* H. Karst. | **paparahua** | 1725 |
| Moraceae | *Batocarpus orinocensis* H. Karst. | **paparahua** | 2495 |
| Moraceae | *Batocarpus orinocensis* H. Karst. | **sacha paparahua** | 2343 |
| Moraceae | *Brosimum* | **cumalu** | 2197 |
| Moraceae | *Brosimum multinervium* C.C. Berg | **paparahua, batya muyu** | 1848 |
| Moraceae | *Clarisia biflora* Ruiz & Pav. | **sacha abiyu** | 1917 |
| Moraceae | *Clarisia biflora* Ruiz & Pav. | **tuta pishcu parutu** | 2303 |
| Moraceae | *Clarisia racemosa* Ruiz & Pav. | **ahuarashi, chinchi** | 1700 |
| Moraceae | *Ficus* | **chiquiri parutu** | 2421 |

| | | | |
|---|---|---|---|
| Moraceae | *Ficus* | **chunda saputi** | 1709 |
| Moraceae | *Ficus* | **cuhua** | 2504 |
| Moraceae | *Ficus* | **cuhua parutu, tuta pishcu parutu** | 1840 |
| Moraceae | *Ficus* | **ila** | 1743 |
| Moraceae | *Ficus* | **ila, matapalo** | 1762 |
| Moraceae | *Ficus* | [name?] | 1894 |
| Moraceae | *Ficus* | **parutu** | 1864 |
| Moraceae | *Ficus* | **parutu muyu** | 1834 |
| Moraceae | *Ficus* | **tuta pishcu parutu, mata palo** | 2287 |
| Moraceae | *Maquira calophylla* (Poepp. & Endl.) C.C. Berg | **ardilla inchi** | 2248 |
| Moraceae | *Perebea* | **batya batya muyu** | 1826 |
| Moraceae | *Perebea* | **chunda paparahua** | 1891 |
| Moraceae | *Perebea* | **mundu ardilla caspi** | 2319 |
| Moraceae | *Perebea guianensis* Aubl. | **maquin ducu** | 2304 |
| Moraceae | *Perebea guianensis* Aubl. | **paparahua** | 2086 |
| Moraceae | *Perebea mollis* (Poepp. & Endl.) Huber | **ardilla paparahua** | 2201 |
| Moraceae | *Perebea xanthochyma* H. Karst. | **patya patya paparahua, urpi paparahua** | 2290 |
| Moraceae | *Perebea xanthochyma* H. Karst. | **sinchi caspi** | 1703 |
| Moraceae | *Poulsenia armata* (Miq.) Standl.? | **lanchamba** | 1835 |
| Moraceae | *Poulsenia armata* (Miq.) Standl. | **llanchama, lanchama** | 2265 |
| Moraceae | *Poulsenia armata* (Miq.) Standl. | **llanchama, lanchama** | 2621 |
| Moraceae | *Pourouma* | **churu uvillas** | 2111 |
| Moraceae | *Pourouma* | **guilin guili muyu** | 1811 |
| Moraceae | *Pourouma cecropiifolia* Mart. | **uvillas** | 2142 |
| Moraceae | *Pourouma guianensis* Aubl. | **urpi uvillas** | 1844 |
| Moraceae | *Pourouma minor* Benoist | **guilin guili** | 2577 |
| Moraceae | *Pourouma napoensis* C.C. Berg | **urpi uvillas** | 2062 |
| Moraceae | *Pourouma napoensis* C.C. Berg | **tsuntsu uvillas** | 2399 |
| Moraceae | *Pourouma napoensis* C.C. Berg | **urcu uvillas** | 2514 |
| Moraceae | *Pourouma napoensis* C. C. Berg | **urcu uvillas** | 2515 |
| Moraceae | *Pseudolmedia laevigata* Trécul | **chunda ardilla caspi** | 2545 |
| Moraceae | *Sorocea* ? | **puma caspi** | 2294 |
| Moraceae | *Sorocea* | **shigra caspi** | 2092 |
| Musaceae | *Musa* | **pishcu palanda** | 2665 |
| Myristicaceae | *Compsoneura sprucei* (A. DC.) Warb. | **huapa** | 1727 |
| Myristicaceae | *Compsoneura sprucei* (A. DC.) Warb. | **sicu mani** | 1842 |
| Myristicaceae | *Iryanthera* | **mulija muyu** | 2024 |
| Myristicaceae | *Iryanthera* | **mulija muyu** | 2570 |
| Myristicaceae | *Iryanthera* | **tilla cara** | 1780 |
| Myristicaceae | *Otoba parvifolia* (Markgr.) A.H. Gentry | **puca panga huapa** | 2718 |
| Myristicaceae | *Virola* | **cibu yura, tilla cara cibu** | 1806 |
| Myristicaceae | *Virola* | **sagra huapa** | 1819 |
| Myristicaceae | *Virola* | **sibu huapa** | 2658 |
| Myristicaceae | *Virola calophylla* (Spruce) Warb. | **huapa yura** | 1626 |
| Myristicaceae | *Virola duckei* A.C. Sm. | **quiruyu huapa** | 1918 |
| Myristicaceae | *Virola duckei* A.C. Sm. | **taslla cara huapa** | 2584 |
| Myristicaceae | *Virola elongata* (Benth.) Warb. | **dumbiqui huapa** | 2389 |
| Myristicaceae | *Virola elongata* (Benth.) Warb. | **huapa** | 1779 |
| Myristicaceae | *Virola elongata* (Benth.) Warb. | **ichilla huapa** | 1739 |
| Myristicaceae | *Virola sebifera* Aubl. | **pilchi huapa** | 2071 |

| | | | |
|---|---|---|---|
| Myrsinaceae | *Cybianthus* | **chini curu panga** | 2503 |
| Myrsinaceae | *Cybianthus poeppigii* Mez | **chini curu panga** | 2049 |
| Myrsinaceae | *Cybianthus poeppigii* Mez | **chundarucu caspi** | 1985 |
| Myrsinaceae | *Cybianthus sprucei* (Hook. f.) A. Agostini | **puma panga** | 2077 |
| Myrsinaceae | *Cybianthus sprucei* (Hook. f.) A. Agostini | **puma tahuacu** | 1678 |
| Myrsinaceae | *Cybianthus sprucei* (Hook. f.) A. Agostini | **puma tahuacu panga** | 1663 |
| Myrsinaceae | *Cybianthus sprucei* (Hook. f.) A. Agostini | **siruchu panga** | 2171 |
| Myrsinaceae? | *Cybianthus sprucei* (Hook. f.) A. Agostini | **yacami panga** | 2397 |
| Myrsinaceae | *Geissanthus ecuadorensis* Mez | **aya tullu yura** | 1715 |
| Myrsinaceae | *Stylogyne* ? | **aya callu panga** | 2524 |
| Myrtaceae | | **antsimbara muyu** | 1940 |
| Myrtaceae? | | **chiri caspi** | 1696 |
| Myrtaceae | | **chundarucu caspi** | 1676 |
| Myrtaceae | | **chundárucu huangashi** | 1871 |
| Myrtaceae | | **cuchi curuta muyu** | 2335 |
| Myrtaceae | | **huangashi** | 2181 |
| Myrtaceae | | **juyarina panga** | 1799 |
| Myrtaceae | | **mulchi, chunda rucu uvillas** | 2017 |
| Myrtaceae | | **munu paju yura** | 2195 |
| Myrtaceae | | **urcu huaihuasi** | 1989 |
| Myrtaceae | *Eugenia* | **alpalla huangashi** | 2316 |
| Myrtaceae | *Eugenia?* | **huangashi** | 1818 |
| Myrtaceae | *Eugenia cuspidifolia* DC. | **mati cara** | 1683 |
| Myrtaceae | *Eugenia cuspidifolia* DC. | **mati cara** | 2090 |
| Myrtaceae | *Eugenia feijoi* O. Berg | **yunga mati cara** | 2553 |
| Myrtaceae | *Psidium guajava* L. | **huayabas** | 2509 |
| Nyctaginaceae | *Neea* | **aya tullu muyu** | 1865 |
| Nyctaginaceae | *Neea* | **challua panga** | 1793 |
| Nyctaginaceae | *Neea* | **indillama panga** | 1790 |
| Nyctaginaceae | *Neea* | ***supai nigri cara panga** | 2521 |
| Nyctaginaceae | *Neea* | **tsuntsu yura** | 1783 |
| Nyctaginaceae | *Neea divaricata* Poepp. & Endl. | **yana muyu** | 1823 |
| Nyctaginaceae | *Neea parviflora* Poepp. & Endl. | **chintu caspi** | 1738 |
| Ochnaceae | *Cespedesia spathulata* (Ruiz & Pav.) Planch. | **amarun caspi** | 1694 |
| Ochnaceae | *Ouratea* | **amarun caspi** | 2217 |
| Ochnaceae | *Ouratea* | **pishcu jaya cara** | 2315 |
| Olacaceae | *Heisteria* | **pupu pahuana caspi** | 1621 |
| Olacaceae | *Heisteria acuminata* (Bonpl.) Engl. | **huagra anuna** | 2558 |
| Olacaceae | *Heisteria acuminata* (Bonpl.) Engl. | **machiqui bisu, machacui bisu** | 2222 |
| Olacaceae | *Minquartia guianensis* Aubl. | **huambula** | 1682 |
| Olacaceae | *Minquartia guianensis* Aubl. | **huambula** | 1978 |
| Orchidaceae | | **chupu sacha** | 1587 |
| Orchidaceae | | **chupu sacha** | 2416 |
| Orchidaceae | | **chupu sacha** | 2417 |
| Orchidaceae | | **chupu sali** | 2352 |
| Orchidaceae | | **gunuhuaru panga** | 2022 |
| Orchidaceae | | **huama pishcu panga** | 2435 |
| Orchidaceae | | **linsinguiri chupa** | 2396 |
| Orchidaceae | | **uchuculun panga** | 2530 |
| Orchidaceae | | **urpi chupu panga** | 2531 |
| Orchidaceae | *Cycnoches* | **chupu sali** | 2613 |
| Orchidaceae | *Dichaea* | **tiricu huasca** | 2383 |

| | | | |
|---|---|---|---|
| Orchidaceae | *Palmorchis* | **canuhua panga** | 2072 |
| Orchidaceae | *Vanilla palmarum* (Salzm. ex Lindl.) Lindl. ? | **vainilla** | 2126 |
| Oxalidaceae | *Oxalis ortigiesii* Regel | **shicshi panga** | 1697 |
| Oxalidaceae | *Oxalis ortigiessi* Regel | **mariposa panga** | 1757 |
| Passifloraceae | *Passiflora* | **gariana uvillas** | 1872 |
| Passifloraceae | *Passiflora* | **garna uvillas, garnavilla** | 2036 |
| Passifloraceae | *Passiflora* | **mangu cucuna, shigra cucuna** | 2119 |
| Passifloraceae | *Passiflora* | **paya paya muyu, maracuya** | 2069 |
| Passifloraceae | *Passiflora* | **puca inda** | 2436 |
| Passifloraceae | *Passiflora* | **ucucha garna uvillas** | 2586 |
| Passifloraceae | *Passiflora* ? | **ucucha garnavillas** | 2539 |
| Passifloraceae | *Passiflora foetida* L. | **mangu cucuna** | 2592 |
| Piperaceae | | **sacha tanambu** | 1602 |
| Piperaceae | *Peperomia* | **caracha yuyu** | 2662 |
| Piperaceae | *Peperomia* | **rumi yuyu** | 2157 |
| Piperaceae | *Peperomia* | **taracuhua panga** | 2384 |
| Piperaceae | *Peperomia* | **taracuhua panga** | 2394 |
| Piperaceae | *Peperomia* | **yahuati panga** | 2136 |
| Piperaceae | *Peperomia* | **yahuati panga** | 2721 |
| Piperaceae | *Piper* | **cara chupa panga** | 2101 |
| Piperaceae | *Piper* | **jahua yana mucu** | 2574 |
| Piperaceae | *Piper* | **jandya huasca** | 2560 |
| Piperaceae | *Piper* | **jatun panga dzicu** | 2308 |
| Piperaceae | *Piper* | **luca pishcu panga** | 2458 |
| Piperaceae | *Piper* | **mija yura, mija caspi** | 1967 |
| Piperaceae | *Piper* | **mucu caspi** | 1971 |
| Piperaceae | *Piper* | **ñabi nanai angu** | 1973 |
| Piperaceae | *Piper* | **ñabi tapa yura** | 1981 |
| Piperaceae | *Piper* | [name?] | 1984 |
| Piperaceae | *Piper* | **puma callu panga** | 2174 |
| Piperaceae | *Piper* | **quiru panga** | 1769 |
| Piperaceae | *Piper* | **uma nanai panga** | 1775 |
| Piperaceae | *Piper* | **venado panga, chundarucu panga** | 2371 |
| Piperaceae | *Piper* | ***yacami panga** | 2525 |
| Piperaceae | *Piper* | **yana mucu** | 2249 |
| Piperaceae | *Piper* | **zicu** | 2047 |
| Piperaceae | *Sarcorhachis* | **santa mariya angu** | 1965 |
| Poaceae | | **machacui huama** | 2213 |
| Poaceae | | **mashu quihua** | 2255 |
| Poaceae | | **mauca curi panga** | 2585 |
| Poaceae | | **micái** | 2605 |
| Poaceae | | **millai quihua** | 2606 |
| Poaceae | | **puca quihua** | 2491 |
| Poaceae | | **puma quihua** | 2601 |
| Poaceae | | **sicu pingullu** | 2259 |
| Poaceae | *Axonopus scoparius* (Flüggé) Kuhlm. | **gramalote** | 2488 |
| Poaceae | *Chusquea* | **suru** | 2382 |
| Poaceae | *Chusquea* | **urcu huama** | 2559 |
| Poaceae | *Guadua* | **ali huama, sinchi huama, casha huama** | 1853 |
| Poaceae | *Gynerium sagittatum* (Aubl.) P. Beauv. | **pindu** | 2183 |

| | | | |
|---|---|---|---|
| Poaceae | *Panicum maximum* Jacq. | **caballu micuna quihua** | 2487 |
| Poaceae | *Pariana* | **curi panga** | 2163 |
| Poaceae | *Pariana* | **muru pingullu** | 2440 |
| Poaceae | *Pariana* | **suru panga** | 2015 |
| Poaceae | *Pariana* | **suru panga** | 2018 |
| Poaceae | *Pharus* | **mashu quihua** | 2346 |
| Polygonaceae | *Coccoloba mollis* Casar. | **rumi caspi** | 2611 |
| Polygonaceae | *Triplaris* | **añangu caspi** | 2115 |
| Polygonaceae | *Triplaris dugandii* Brandbyge | **añangu caspi** | 2221 |
| Pteridophyta | | **garahuatu yuyu** | 2591 |
| Pteridophyta- Marattiaceae | *Danaea* | **urcu sasa** | 2189 |
| Pteridophyta-Aspleniaceae | *Asplenium* aff. *auritum* Sw. | **chichinda, chichinta** | 1964 |
| Pteridophyta-Aspleniaceae | *Asplenium rutaceum* (Willd.) Mett. | **chichinda** | 2008 |
| Pteridophyta-Aspleniaceae | *Asplenium rutaceum* (Willd.) Mett. | **machacui chichinda, machacui chichinta** | 1776 |
| Pteridophyta-Aspleniaceae | *Asplenium serratum* L. | **atata panga** | 2459 |
| Pteridophyta-Cyatheaceae? | *Cyathea*? | **chichinda** | 2502 |
| Pteridophyta-Cyatheaeceae | *Cyathea*? | **llambu chichinda** | 2510 |
| Pteridophyta-Davalliaceae | *Nephrolepis*? | **tiricu huasca** | 2042 |
| Pteridophyta-Dryopteridaceae | *Diplazium aberrans* Maxon & C. V. Morton | **zingra panga** | 2082 |
| Pteridophyta-Dryopteridaceae | *Diplazium pinnatifidum* Kunze | **paushi panga** | 1982 |
| Pteridophyta-Hymenophyllaceae | *Trichomanes elegans* Rich. | **munani chichinda** | 2210 |
| Pteridophyta-Polypodiaceae | *Campyloneurum nitidissimum* (Mett.) Ching | **puraqui panga** | 1752 |
| Pteridophyta-Polypodiaceae | *Campyloneurum repens* (Aubl.) C. Presl | **puraqui, anguila** | 1634 |
| Pteridophyta-Polypodiaceae | *Grammitis lanigera* (Desv.) C. V. Morton | **yacu huasca** | 1946 |
| Pteridophyta-Polypodiaceae | *Polypodium dasypleuron* Kunze | **accha huiñana panga** | 1768 |
| Pteridophyta-Polypodiaceae | *Polypodium decumanum* Willd. | **cutu chichinda** | 2262 |
| Pteridophyta-Pteridaceae | *Adiantum* aff. *humile* Kunze | **biruti yuyu** | 1749 |
| Pteridophyta-Vittariaceae | *Antrophyum* | **basu yuyu** | 1927 |
| Pteridophyta-Vittariaceae | *Antrophyum* | **pungui panga** | 1959 |
| Rhamnaceae | *Gouania* | **amarun huasca** | 2652 |
| Rhamnaceae | *Gouania* | **putsucu panga, jabun panga** | 2205 |
| Rosaceae | *Prunus debilis* Koehne | **sindi muyu** | 2089 |
| Rubiaceae | | **aya tullu** | 2046 |
| Rubiaceae | | **cafe moto** | 2630 |
| Rubiaceae | | **cafe nacional** | 2642 |
| Rubiaceae | | **cafe robusto** | 2623 |
| Rubiaceae | | **caspi casha** | 2279 |
| Rubiaceae | | **chaca caspi** | 2120 |
| Rubiaceae | | **jambatu paju panga** | 2215 |
| Rubiaceae | | **lumucha ñabi** | 2075 |
| Rubiaceae | | **yacu samiruca** | 2278 |
| Rubiaceae | | **yana muyu, alpalla yana muyu** | 1904 |
| Rubiaceae | *Alseis* | **pucuna caspi** | 2152 |

| | | | |
|---|---|---|---|
| Rubiaceae | *Bertiera* | **mucu tullu** | 2365 |
| Rubiaceae | *Capirona decorticans* Spruce | **indi caspi** | 2121 |
| Rubiaceae | *Capirona decorticans* Spruce | **tahuacu caspi yura** | 2461 |
| Rubiaceae | *Chimarrhis hookeri* K. Schum. | **micha yura** | 2538 |
| Rubiaceae | *Chimarrhis hookeri* K Schum. | **ushpa muyu** | 2127 |
| Rubiaceae | *Chomelia* | **supi caspi, supi muyu, supi panga** | 2385 |
| Rubiaceae | *Coussarea* | **juya yura** | 1668 |
| Rubiaceae | *Coussarea* ? | **papalli caspi** | 1669 |
| Rubiaceae | *Coussarea* ? | **turipa caspi** | 1649 |
| Rubiaceae | *Coussarea* | **urcu curpus** | 2322 |
| Rubiaceae | *Coussarea dulcifolia* Dwyer, Neill & Cerón ined. | **mishqui muyu panga** | 1913 |
| Rubiaceae | *Duroia hirsuta* (Poepp. & Endl.) Schum. | **pandu abiyu** | 1845 |
| Rubiaceae | *Duroia hirsuta* (Poepp. & Endl.) Schum. | **pandu abiyu** | 2285 |
| Rubiaceae | *Duroia hirsuta* (Poepp. & Endl.) Schum. | **pandu yura** | 1969 |
| Rubiaceae | *Faramea* | **huachi caspi** | 2321 |
| Rubiaceae | *Faramea* | **sara casanga** | 2453 |
| Rubiaceae | *Faramea* | ***shingui panga** | 2523 |
| Rubiaceae | *Faramea* | **urcu turipa caspi** | 2327 |
| Rubiaceae | *Faramea anisocalyx* Poepp. | **paccha muyu** | 1650 |
| Rubiaceae | *Faramea glandulosa* Poepp. | **yana muyu** | 1724 |
| Rubiaceae | *Faramea quinqueflora* Poepp. & Endl. | **quillu yura** | 1651 |
| Rubiaceae | *Faramea quinqueflora* Poepp. & Endl. | **yana muyu** | 1900 |
| Rubiaceae | *Genipa* ? | **mati cara muyu** | 1880 |
| Rubiaceae | *Guettarda* cf. *hirsuta* (Ruiz & Pav.) Pers. | **pusara manduru** | 1952 |
| Rubiaceae | *Hamelia patens* Jacq. | **curu panga** | 2388 |
| Rubiaceae | *Ladenbergia oblongifolia* (Mutis) L. Andersson | **purutu caspi** | 1742 |
| Rubiaceae | *Manettia* | **yuturi angu** | 2206 |
| Rubiaceae | *Palicourea* | **curpus** | 1656 |
| Rubiaceae | *Palicourea* | **curpus yura** | 1728 |
| Rubiaceae | *Pentagonia macrophylla* Benth. | **isma arcarina** | 2402 |
| Rubiaceae | *Pentagonia macrophylla* Benth. | **yutu caspi** | 1852 |
| Rubiaceae | *Pentagonia spathicalyx* Schum. | **huitu caspi muyu** | 2028 |
| Rubiaceae | *Posoqueria latifolia* (Rudge) Roem. & Schult. | **yana mucu** | 2135 |
| Rubiaceae | *Psychotria* | **chini curu caracha panga** | 1912 |
| Rubiaceae | *Psychotria* | **paju caspi** | 2376 |
| Rubiaceae | *Psychotria* | **pischu micuna yura** | 1681 |
| Rubiaceae | *Psychotria* | **sacha ishpa muyu panga** | 2497 |
| Rubiaceae | *Psychotria* | **urcu pichanga** | 2192 |
| Rubiaceae | *Psychotria alboviridula* K. Krause | **upa yura** | 1635 |
| Rubiaceae | *Psychotria albovridula* K. Krause | **gunahuaru yura** | 1652 |
| Rubiaceae | *Psychotria* cf. *borjensis* Kunth | **sami ruca** | 1581 |
| Rubiaceae | *Psychotria elata* (Sw.) Hammel | **sinchi pichanga** | 2159 |
| Rubiaceae | *Psychotria pilosa* Ruiz & Pav. | **yanan dzicu** | 2550 |
| Rubiaceae | *Psychotria poeppigiana* Müll. Arg. | **cacatao panga** | 1930 |
| Rubiaceae | *Psychotria remota* Benth. | **paju caspi** | 1579 |
| Rubiaceae | *Psychotria remota* Benth. | **sami ruca** | 1584 |
| Rubiaceae | *Psychotria stenostachya* Standl. | **pangura muyu** | 2226 |
| Rubiaceae | *Psychotria umbriana* (Standl.) Steyerm. | **tuta pishcu nigri, chimbilacu nigri** | 1873 |
| Rubiaceae | *Psychotria viridis* Ruiz & Pav. | **sacha yaji** | 1986 |

| | | | |
|---|---|---|---|
| Rubiaceae | *Randia* | **acha caspi** | 2449 |
| Rubiaceae | *Randia* | **casha caspi** | 2032 |
| Rubiaceae | *Richardia* | **istrilla quihua** | 2587 |
| Rubiaceae | *Uncaria guianensis* (Aubl.) J.F. Gmel. | **sacala casha, uña de gato** | 2212 |
| Rubiaceae | *Warszewiczia* | **urcu yura** | 1801 |
| Sabiaceae | *Meliosma* | **huacamayu muyu** | 1788 |
| Sapindaceae | | **ichilla gaitari** | 1925 |
| Sapindaceae | *Allophylus* | **chindaqui, tsindacu** | 1789 |
| Sapindaceae | *Allophylus* | **tsindacu** | 2182 |
| Sapindaceae | *Allophylus* | **tsindacu** | 2555 |
| Sapindaceae | *Cupania* | **gariana** | 1990 |
| Sapindaceae | *Cupania cinerea* Poepp. | **uritu caspi** | 1731 |
| Sapindaceae | *Paullinia* | **cuchi angu** | 2314 |
| Sapindaceae | *Paullinia* | **cuchi huasca** | 2635 |
| Sapindaceae | *Paullinia* | **gaitari** | 1761 |
| Sapindaceae | *Paullinia* | **gaitari angu** | 2253 |
| Sapindaceae | *Paullinia* | **gaytari** | 2140 |
| Sapindaceae | *Paullinia* | **yura inda** | 2058 |
| Sapindaceae | *Serjania* | **inda panga** | 1760 |
| Sapindaceae | *Serjania* | **inda panga** | 1956 |
| Sapotaceae | | **urcu abiyu** | 2038 |
| Sapotaceae | *Chrysophyllum venezuelanense*? (Pierre) T.D. Penn. | **calmitu** | 2014 |
| Sapotaceae | *Chrysophyllum venezuelanense* (Pierre) T.D. Penn. | **calmitu muyu** | 2162 |
| Sapotaceae | *Chrysophyllum venezuelanense* (Pierre) T.D. Penn. | **cuchara caspi** | 1785 |
| Sapotaceae | *Micropholis egensis* (A. DC.) Pierre | **urcu abiyu** | 2289 |
| Sapotaceae | *Pouteria* | **abiyu** | 2407 |
| Sapotaceae | *Pouteria* | **calmitu** | 2620 |
| Sapotaceae | *Pouteria* | **chunda abiyu, puca panga abiyu** | 2216 |
| Sapotaceae | *Pouteria* | **curu muyu** | 2196 |
| Sapotaceae | *Pouteria* | **jahua calmitu** | 2317 |
| Sapotaceae | *Pouteria* | **lucuma** | 2079 |
| Sapotaceae | *Pouteria* | **lucuma yura** | 2337 |
| Sapotaceae | *Pouteria* | **papali abiyu** | 1943 |
| Sapotaceae | *Pouteria* | **papali abiyu, sacha abiyu** | 1830 |
| Sapotaceae | *Pouteria* | **rumi caspi** | 1859 |
| Sapotaceae | *Pouteria* | **urcu abiyu** | 1908 |
| Sapotaceae | *Pouteria* | **urcu saputi** | 2041 |
| Sapotaceae | *Pouteria* | **yura calmitu** | 1944 |
| Saxifragaceae? | *Hydrangea* ? | **cutu ariana panga** | 2494 |
| Saxifragaceae | *Hydrangea* | **mashu angu** | 2002 |
| Selaginellaceae | *Selaginella* cf. *producta* Baker | **ushicu panga, ushicu chichinda** | 2705 |
| Selaginellaceae | *Selaginella exaltata* (Kunze) Spring. | **juri juri huasca** | 1950 |
| Selaginellaceae | *Selaginella speciosa* A. Braun | **huamani accha, huamani chichinda** | 2557 |
| Simaroubaceae | | **chilca ambi muyu** | 1585 |
| Simaroubaceae | *Picramnia* | **atalpa uchu** | 1787 |
| Simaroubaceae | *Picramnia* | **ullahuanga sani** | 1837 |
| Simaroubaceae | *Picramnia magnifolia* J. F. Macbr. | **ullahuanga sani** | 1638 |
| Simaroubaceae | *Picramnia magnifolia* J. F. Macbr. | **ullahuanga sani** | 1677 |

| | | | |
|---|---|---|---|
| Simaroubaceae | *Picramnia sellowii* subsp. *spruceana* (Engler) Pirani | **sani** | 1642 |
| Simaroubaceae | *Picramnia sellowii* subsp. *spruceana* (Engler) Pirani | **sani** | 2088 |
| Simaroubaceae | *Picramnia sellowii* subsp. *spruceana* (Engler) Pirani | **sani** | 2406 |
| Simaroubaceae | *Simarouba amara* Aubl. | **linsu caspi** | 2561 |
| Solanaceae? | | **cundisu** | 2700 |
| Solanaceae | | **lumu cuchi huandu, sahinu huandu** | 2364 |
| Solanaceae? | | **mango cucuna** | 1829 |
| Solanaceae | | **yana panga** | 2051 |
| Solanaceae | | **yutu panga** | 2439 |
| Solanaceae | *Brugmansia* | **cielu huandu** | 2507 |
| Solanaceae | *Brugmansia* | **lumu cuchi huandu** | 2485 |
| Solanaceae | *Brugmansia* | **nanai huandu** | 2626 |
| Solanaceae | *Brugmansia* | **palanda huandu** | 2492 |
| Solanaceae | *Brugmansia* | **yacu huandu** | 2424 |
| Solanaceae | *Brunfelsia* | **chiri caspi** | 1851 |
| Solanaceae | *Brunfelsia* | **chiri huayusa** | 2534 |
| Solanaceae | *Brunfelsia* | **sicu chiri caspi** | 2603 |
| Solanaceae | *Capsicum* | **bula muyu uchu** | 1910 |
| Solanaceae | *Capsicum* | **casimiru uchu** | 1924 |
| Solanaceae | *Capsicum* | **puca uchu** | 1896 |
| Solanaceae | *Capsicum chinense* Jacq. | **arara uchu** | 1613 |
| Solanaceae | *Capsicum chinense* Jacq. | **biruti uchu, sasi uchu** | 1611 |
| Solanaceae | *Capsicum chinense* Jacq. | **palanda uchu** | 1612 |
| Solanaceae | *Cestrum* | **sistimu panga** | 2063 |
| Solanaceae | *Cestrum silvaticum* Francey | **irqui huayusa, supai nigri panga** | 2078 |
| Solanaceae | *Juanulloa ochracea* Cuatrec. | **chiri yuyu, chiri panga** | 2463 |
| Solanaceae | *Juanulloa ochracea* Cuatrec. | **quillu caracha panga** | 1814 |
| Solanaceae | *Lycianthes* | ***atacapi panga** | 2522 |
| Solanaceae | *Lycianthes* | **pandu yuyu** | 2408 |
| Solanaceae | *Lycianthes* | **sistimu panga** | 1770 |
| Solanaceae | *Lycopersicon* | **tomate** | 2610 |
| Solanaceae | *Physalis* | **saca cucuna, butyu** | 2633 |
| Solanaceae | *Physalis pubescens* L. | **tsuntsu saca cucuna** | 2639 |
| Solanaceae | *Solanum* | **aya huandu** | 2269 |
| Solanaceae | *Solanum* | **bapa** | 2420 |
| Solanaceae | *Solanum* | **chupu naranjilla** | 2599 |
| Solanaceae | *Solanum* | **saparu muyu** | 2641 |
| Solanaceae | *Solanum* | **ucucha caspi** | 2519 |
| Solanaceae | *Solanum* | **yana cucuna** | 2625 |
| Solanaceae | *Solanum* | **yana panga** | 2070 |
| Solanaceae | *Solanum* | **yura inta** | 1957 |
| Solanaceae | *Solanum aturense* Dunal | **pishira huasca angu** | 1958 |
| Solanaceae | *Solanum barbeyanum* Huber | **cucuna, sacha cucuna, sacha cucuna angu** | 1647 |
| Solanaceae | *Solanum leptopodum* Van Heurck & Müll. Arg. | [name?] | 1629 |
| Solanaceae | *Solanum quitoense* Lam. | **naranjilla** | 2628 |
| Solanaceae | *Solanum quitoense* Lam. | **nativo naranjilla** | 2156 |
| Solanaceae | *Solanum straminofolium* Jacq. | **ichilla cucuna, bahichu** | 1591 |

| | | | |
|---|---|---|---|
| Solanaceae | *Solanum straminofolium* Jacq. | **uchu cucuna** | 1607 |
| Solanaceae | *Witheringia* | ***chuqui panga** | 2527 |
| Sterculiaceae | *Herrania mariae* (Mart.) Decne. ex Goudot | **tsirinda** | 1777 |
| Sterculiaceae | *Sterculia* | **aparina cara saputi** | 2298 |
| Sterculiaceae | *Sterculia* | **chunda saputi** | 1861 |
| Sterculiaceae | *Sterculia* | **saputi muyu, sapote muyu** | 1804 |
| Sterculiaceae | *Theobroma cacao* L. | **ichilla puca cacao** | 2627 |
| Sterculiaceae | *Theobroma cacao* L. | **jatun muyu puca cacao** | 2643 |
| Sterculiaceae | *Theobroma cacao* L. | **quillu cacao** | 2629 |
| Sterculiaceae | *Theobroma subincanum* Mart. | **chunda cacao** | 2277 |
| Sterculiaceae | *Theobroma subincanum* Mart. | **chunda cacao** | 2646 |
| Sterculiaceae | *Theobroma subincanum* Mart. | **sacha cacao** | 1941 |
| Symplocaceae | *Symplocos arechea* L'Her. | **mishqui cara muyu** | 1625 |
| Theophrastaceae | *Clavija* | **manga alpa muyu** | 2113 |
| Theophrastaceae | *Clavija* | **pahua caspi** | 1987 |
| Theophrastaceae | *Clavija* | **paushi mulija** | 2128 |
| Theophrastaceae | *Clavija weberbaueri* Mez. | **llausa muyu** | 1627 |
| Theophrastaceae | *Clavija weberbaueri* Mez. | **molija muyu, purutu muyu** | 1713 |
| Theophrastaceae | *Clavija weberbaueri* Mez. | **paushi curuta muyu** | 1939 |
| Theophrastaceae | *Clavija weberbaueri* Mez. | **puru paquinga** | 1644 |
| Thymelaeaceae | *Daphnopis equatorialis* Nevling | **dumbiqui uchu** | 2112 |
| Thymelaeaceae | *Schoenobiblus daphnoides* Mart. & Zucc. | **dumbiqui uchu, iluchi** | 1893 |
| Tiliaceae? | | **ushpa muyu** | 1746 |
| Tiliaceae | *Apeiba aspera* Aubl. | **ñaccha caspi** | 1810 |
| Tiliaceae | *Apeiba aspera* Aubl. | **ñaccha caspi** | 2165 |
| Tiliaceae | *Heliocarpus americanus* L. | **yura balsa, yuran balsa, damaja** | 2419 |
| Ulmaceae | *Celtis schippii* Standl. | **shishillamba** | 1704 |
| Urticaceae | *Pilea* | **pahua yuyu** | 2239 |
| Urticaceae | *Pilea* | **quiru yuyu, quiru panga** | 2554 |
| Urticaceae | *Urera* | **amarun chini** | 2271 |
| Urticaceae | *Urera* | **huasca chini** | 2415 |
| Urticaceae | *Urera baccifera* (L.) Gaudich. ex Wedd. | **aya chini** | 2010 |
| Verbenaceae | *Aegiphila cuneata* Moldenke | **cunga shicshi panga** | 1729 |
| Verbenaceae | *Citharexylum poeppiggi* Walp. | **criadero, huiñarisiqui** | 2588 |
| Verbenaceae | *Verbena* | **catarro huayusa** | 2632 |
| Violaceae | *Gloeospermum* | **chichicu muyu** | 2318 |
| Violaceae | *Gloeospermum* | **cucaracha muyu** | 2339 |
| Violaceae | *Gloeospermum* | **quillu muyu** | 1892 |
| Violaceae | *Gloeospermum* | **quillu muyu** | 2026 |
| Violaceae | *Leonia crassa* L.B. Smith & Fern.-Pérez | **ahua sulima** | 2377 |
| Violaceae | *Leonia crassa* L.B. Smith & Fern.-Pérez | **chupu muyu** | 1707 |
| Violaceae | *Leonia glycycarpa* Ruiz & Pav. | **chupu yura** | 1795 |
| Violaceae | *Leonia glycycarpa* Ruiz & Pav. | **quillu yura** | 1858 |
| Vitaceae | *Cissus* | **angu muyu** | 1797 |
| Vitaceae | *Cissus* | **chulcu** | 1764 |
| Vochysiaceae | *Vochysia* | **sacha anunas** | 2228 |
| Vochysiaceae | *Vochysia* | **urcu tamburu** | 2326 |
| Zingiberaceae | *Costus* | **yamba chihuilla** | 2513 |
| Zingiberaceae | *Costus longebracteolatus* Maas | **sacha chihuilla, sacha chibilla** | 1628 |
| Zingiberaceae | *Renealmia* | **curu panga** | 2268 |
| Zingiberaceae | *Renealmia* | **ichilla lumu maca** | 2310 |

| | | | |
|---|---|---|---|
| Zingiberaceae | *Renealmia* | **machacui shangu** | 2238 |
| Zingiberaceae | *Renealmia* | **muti panga** | 2191 |
| Zingiberaceae | *Renealmia* | **quillu shangu** | 1889 |
| Zingiberaceae | *Renealmia* | **shangu** | 2276 |
| Zingiberaceae | *Zingiber* | **ajirinri** | 1590 |
| Zingiberaceae | *Zingiber* | **arjirinbi** | 2669 |
| Zingiberaceae | *Zingiber officinale* Roscoe | **alcu aljinbri** | 2667 |
| Zingiberaceae | *Zingiber officinale* Roscoe | **sinsiri arjinbi** | 2664 |
| Undetermined | | **alcu chaqui paparahua** | 2360 |
| Undetermined | | **amarun huasca** | 2247 |
| Undetermined | | **aparina cara** | 2299 |
| Undetermined | | **arasá** | 2600 |
| Undetermined | | **ardilla caspi** | 1636 |
| Undetermined | | **atu sara, huataracu muyu** | 2357 |
| Undetermined | | **aya cara** | 1575 |
| Undetermined | | **aya muyu** | 1878 |
| Undetermined | | **aya muyu** | 1895 |
| Undetermined | | **aya tullu yura** | 1637 |
| Undetermined | | **badre angu, bagri angu** | 2311 |
| Undetermined | | **batea muyu** | 2056 |
| Undetermined | | **bimbichu** | 2356 |
| Undetermined | | **cahuitu huasca** | 2347 |
| Undetermined | | **calentura yuyu** | 1597 |
| Undetermined | | **chini curu paju panga** | 1576 |
| Undetermined | | **chini curu panga** | 1640 |
| Undetermined | | **cuchi curuta muyu, cuchi curta muyu** | 2362 |
| Undetermined | | **cupal** | 1604 |
| Undetermined | | **cushillu panga** | 1574 |
| Undetermined | | **cutu panga** | 1992 |
| Undetermined | | **dushan** | 2260 |
| Undetermined | | **gaitari** | 1820 |
| Undetermined | | **huaca panga** | 1578 |
| Undetermined | | **huagra uchu** | 1923 |
| Undetermined | | **huira muyu** | 1902 |
| Undetermined | | **jahua sacha micu** | 2351 |
| Undetermined | | **jahua simisya muyu** | 2348 |
| Undetermined | | **jahua tsuntsu muyu** | 2033 |
| Undetermined | | **lagartu caspi** | 2257 |
| Undetermined | | **lica huasca** | 1877 |
| Undetermined | | **mar pindu** | 2505 |
| Undetermined | | **mariposa panga** | 1595 |
| Undetermined | | **mauca angu** | 2358 |
| Undetermined | | **millai caracha panga** | 1598 |
| Undetermined | | [name forgotten] | 1583 |
| Undetermined | | **nigri upayana muyu** | 2361 |
| Undetermined | | **nuspa paju panga** | 2246 |
| Undetermined | | **pahua curasun muyu** | 2355 |
| Undetermined | | **pishira uchu** | 2251 |
| Undetermined | | **pungui muyu** | 1870 |
| Undetermined | | **pupu caspi** | 1572 |
| Undetermined | | **putsucu muyu** | 2169 |
| Undetermined | | **quibina yuyu** | 2501 |
| Undetermined | | **sani aula muyu** | 2245 |

| | | |
|---|---|---|
| Undetermined | **sapallu muyu** | 2108 |
| Undetermined | **satuca panga** | 2359 |
| Undetermined | **sístimu panga** | 1932 |
| Undetermined | **tambicu caspi** | 2231 |
| Undetermined | **tanambu** | 1593 |
| Undetermined | **tucsi panga** | 1603 |
| Undetermined | **urcu huayabas** | 2284 |
| Undetermined | **uritu callu muyu, uritu sara** | 2286 |
| Undetermined | **yacun guilu** | 1995 |
| Undetermined | **yana abiyu** | 2353 |
| Undetermined | **yana muyu** | 2034 |
| Undetermined | **zigra panga** | 1601 |

# Appendix Two
# Collected Fungi

| Scientific Name | Common Name | Coll. No. |
|---|---|---|
| *Neurospora crassa* | **puca alyu** | 1 |
| Undetermined | **aya ullu** | 6 |
| Undetermined | **aya ullu** | 16 |
| Undetermined | **butun callamba** | 17 |
| Undetermined | **cachi callamba** | 5 |
| Undetermined | **cachi callamba** | 8 |
| Undetermined | **calulu** | 14 |
| Undetermined | **churu callamba** | 19 |
| Undetermined | **cunga shicshi callamba** | 12 |
| Undetermined | **gunahuaru callamba** | 23 |
| Undetermined | **huahua callamba** | 20 |
| Undetermined | **indillama callamba** | 18 |
| Undetermined | **manduru callamba** | 11 |
| Undetermined | **mundu callamba** | 13 |
| Undetermined | name forgotten | 7 |
| Undetermined | **puma callamba, puma nigri** | 15 |
| Undetermined | **puma nigri** | 24 |
| Undetermined | **quillu callamba, shungu callamba** | 22 |
| Undetermined | **raya callamba** | 10 |
| Undetermined | **sara callamba** | 21 |
| Undetermined | **shigra callamba** | 9 |
| Undetermined | **shira callamba** | 3 |
| Undetermined | **shira callamba, shigra callamba** | 4 |

# Appendix Three
# Collected Invertebrates

**Phylum: Platyhelminthes**

**Class: Turbellaria (Flatworms)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-<br>Family Tribe | Genus Species | Common Name | Coll.<br>No. |
|---|---|---|---|---|
| Undetermined | | | **raca supai** | 387 |

**Phylum: Mollusca**

**Class: Gastropoda (Snails and Slugs)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-<br>Family Tribe | Genus Species | Common Name | Coll.<br>No. |
|---|---|---|---|---|
| Stylommatophora | Bulimulidae | | **pahua churu** | 200 |
| Stylommatophora | Bulimulidae | *Bulimus* | **sacha churu** | 57 |
| Stylommatophora | Bulimulidae | *Bulimus* | **puma churu** | 132 |
| Undetermined | | | **timu churu** | 246 |
| Undetermined | | | **nigri churu** | 63 |
| Undetermined | | | **pahua churu** | 74 |
| Undetermined | | | **pahua churu** | 175 |
| Undetermined | | | **yacu churu** | 55 |

**Phylum: Annelida**

**Class: Hirudinea (Leeches)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-<br>Family Tribe | Genus Species | Common Name | Coll.<br>No. |
|---|---|---|---|---|
| Undetermined | | | **tyushi, tushi** | 370 |
| Undetermined | | | **tiushi, shun, sangrejuela** | 249 |

**Class: Oligochaeta (Earthworms)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-<br>Family Tribe | Genus Species | Common Name | Coll.<br>No. |
|---|---|---|---|---|
| Haplotaxidae | Glossoscolecidae | *Martiodrilus* ? | **cuica, lombriz** | 125 |
| Opisthopora | Lumbricidae | | **alpa curu** | 90 |
| Opisthopora | Lumbricidae | | **alpa curu, cuica** | 338 |

**Phylum: Arthropoda**

**Class: Crustacea (Crustaceans)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-Family Tribe | Genus Species | Common Name | Coll. No. |
|---|---|---|---|---|
| Decapoda | | | **bimbillu** | 84 |
| Decapoda | | | **pangura** | 85 |
| Decapoda | | | **cunguri nananga pangura** | 86 |
| Decapoda | | | **pangura** | 78 |
| Decapoda | Pseudo-Thelphusidae? | | **yana cara pangura** | 248 |
| Decapoda | Pseudo-Thelphusidae? | | **cunguri mucu nana pangura** | 380 |

**Class: Diplopoda (Millipedes)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-Family Tribe | Genus Species | Common Name | Coll. No. |
|---|---|---|---|---|
| Julida | Julidae | | **tiricu** | 128 |
| Undetermined | | | **tiricu, shiltipu, cien pies** | 275 |
| Undetermined | | | **tiricu, manga rupachi, acurana curu** | 321 |

**Class: Hexapoda (Insects)**

| Order<br>Sub-Order | Super-Family<br>Family Sub-Family Tribe | Genus Species | Common Name | Coll. No. |
|---|---|---|---|---|
| Anoplura | Pediculidae | *Pediculus humanus capitis* De Geer | **usa** | 161 |
| Blattodea | | | **tatapira** | 20 |
| Blattodea | | | **sacha tatapira** | 232 |
| Blattodea | | | **sacha tatapira** | 233 |
| Blattodea | | | **sacha cucaracha, sacha tatapira** | 287 |
| Blattodea | | | **tuta puri cucaracha** | 339 |
| Blattodea | | | **armadillu tatapira** | 360 |
| Blattodea | Blaberidae | | **armallu cucaracha** | 115 |
| Blattodea | Blattidae | *Blabera* | **tatapira** | 185 |
| Blattodea | Blattidae | *Blabera* | **tatapira, punja cara** | 222 |
| Blattodea | Blattidae | *Blabera* | **ichila punja cara, tatapira, cucaracha** | 381 |
| Coleoptera | | | **chunda curu mama, burashi mama** | 259 |
| Coleoptera | | | **cunga cuchun** | 413 |
| Coleoptera | Brentidae | | **pillan curu mama, susu curu** | 171 |
| Coleoptera | Buprestidae | *Euchroma gigantea* (Linnaeus) | **balsa curu mama** | 385 |
| Coleoptera | Cerambycidae | | **parutu curu mama** | 350 |

| | | | | |
|---|---|---|---|---|
| Coleoptera | Cerambycidae | | **ichila cunga cuchun** | 277 |
| Coleoptera | Cerambycidae | | **caspi curu** | 93a |
| Coleoptera | Cerambycidae | | **crima** | 361 |
| Coleoptera | Cerambycidae | *Batus barbicornis* (Linnaeus) | **parutu burashi mama, parutu curu mama** | 136 |
| Coleoptera | Cerambycidae | *Callichroma* ? | **caspi curu mama** | 349 |
| Coleoptera | Cerambycidae | *Trachyderes succintus* L. | **curu mama** | 3 |
| Coleoptera | Chrysomelidae | | **curi curu mama** | 303 |
| Coleoptera | Chrysomelidae | | **dundu curu** | 323 |
| Coleoptera | Chrysomelidae | *Diabrotica* | **curu mama** | 44 |
| Coleoptera | Chrysomelidae Cassidinae | | **millai caracha mama** | 355 |
| Coleoptera | Cicindelidae | | **sacha pacu** | 271 |
| Coleoptera | Coccinellidae | | **curi curu mama** | 304 |
| Coleoptera | Coccinellidae | | **curu mama** | 46 |
| Coleoptera | Curculionidae | | **quiru nanai, burashi mama** | 35 |
| Coleoptera | Curculionidae | | **quirnai curu mama** | 36 |
| Coleoptera | Curculionidae | | **verde curu mama** | 58 |
| Coleoptera | Curculionidae | | **ichila burashi mama** | 79 |
| Coleoptera | Curculionidae | | **curu mama** | 124 |
| Coleoptera | Curculionidae | | **bicuhuata curu mama, illan curu mama** | 147 |
| Coleoptera | Curculionidae | | **curu** | 245 |
| Coleoptera | Curculionidae | | **quiru nananga, illan curu mama, quiru nanai curu mama** | 348 |
| Coleoptera | Curculionidae | | **uchila yura burashtu, ichilla yura burashi** | 45 |
| Coleoptera | Curculionidae | *Rhinostomus barbirostris* (Fabricius) | **quirnai burashi mama, shundu** | 126 |
| Coleoptera | Curculionidae | *Rhinostomus barbirostris* (Fabricius) | **illan curu mama** | 156 |
| Coleoptera | Curculionidae | *Rhynchophorus palmarum* (Linnaeus) | **burashi mama** | 137 |
| Coleoptera | Curculionidae | *Rhynchophorus palmarum* (Linnaeus) | **chunda curu mama** | 68 |
| Coleoptera | Curculionidae | *Rhynchophorus palmarum* (Linnaeus) | **shiquita curu** | 91 |
| Coleoptera | Elateridae | | **nina curu** | 366 |
| Coleoptera | Elateridae | *Chalcolepidius* | **cucuyu** | 48 |
| Coleoptera | Elateridae | *Physorhinus* | **cucuyu, aya cucuyu** | 54 |
| Coleoptera | Elateridae | *Pyrophorus* | **cucuyu** | 56 |
| Coleoptera | Elateridae | *Pyrophorus* | **cucuyu, cucuya** | 51 |
| Coleoptera | Elateridae | *Semiotus* | **caspi cucuyu** | 206 |
| Coleoptera | Elateridae | *Semiotus imperialis* Guérin | **cucuyu** | 59 |
| Coleoptera | Erotylidae | | **callamba curu mama** | 356 |
| Coleoptera | Erotylidae | | **callamba mama** | 69 |
| Coleoptera | Erotylidae | *Erotylus* | **callamba curu mama** | 23 |
| Coleoptera | Erotylidae | *Erotylus spectrum* Thomson | **callamba micuj curu mama** | 64 |
| Coleoptera | Erotylidae | *Gibbifer zebu* (Kir.) | **name unkown** | 168 |
| Coleoptera | Nitidulidae | | **challun, bunbu, puca mama** | 192 |

| | | | | |
|---|---|---|---|---|
| Coleoptera | Nitidulidae | | [no name] | 67 |
| Coleoptera | Passalidae | | **playa curu** | 362 |
| Coleoptera | Passalidae | | **caspi curu** | 19 |
| Coleoptera | Passalidae | | **caspi curu mama** | 27 |
| Coleoptera | Passalidae | | **llushti curu mama** | 158 |
| Coleoptera | Passalidae | | **zicu** | 327 |
| Coleoptera | Scarabaeidae | | **ushpa curu** | 363 |
| Coleoptera | Scarabaeidae | | **crima** | 411 |
| Coleoptera | Scarabaeidae | *Canthon luteicollis* Erich. | **punja cara curu mama** | 27 |
| Coleoptera | Scarabaeidae | *Canthon luteicollis* Erich. | **papali curu mama** | 293 |
| Coleoptera | Scarabaeidae | *Cyclocephala* | **curu mama** | 14 |
| Coleoptera | Scarabaeidae | *Deltochilum amazonicum* Bates | **crima** | 391 |
| Coleoptera | Scarabaeidae | *Dichotomius* | **sicu mama** | 288 |
| Coleoptera | Scarabaeidae | *Dichotomius mamillatus* Felsch*e* | **indillama curu mama** | 239 |
| Coleoptera | Scarabaeidae | *Dichotomius quiquelobatus* Felsche | **indillama curu mama** | 353 |
| Coleoptera | Scarabaeidae | *Enema pan* (Fabricius) | **zima curu mama** | 164 |
| Coleoptera | Scarabaeidae | *Macraspis* | **caspi curu mama** | 369 |
| Coleoptera | Scarabaeidae | *Megaceras* | **dzima curu mama** | 283 |
| Coleoptera | Scarabaeidae | *Megaceras* | **dzima curu mama, pucuna rura** | 365 |
| Coleoptera | Scarabaeidae | *Megaceras* | **zima curu mama** | 240 |
| Coleoptera | Scarabaeidae | *Megaceras* | **zima curu mama** | 152 |
| Coleoptera | Scarabaeidae | *Megaceras* | **zima** | 157 |
| Coleoptera | Scarabaeidae | *Megasoma acteon* (Linneaus) | **tsema, zima** | 49 |
| Coleoptera | Scarabaeidae | *Ontherus incisus* Kirsch | **sicu mama** | 374 |
| Coleoptera | Scarabaeidae | *Oxysternon conspicillatum* Weber | **isma curu mama** | 50 |
| Coleoptera | Scarabaeidae | *Oxysternon conspicillatum* Weber | **isma curu mama** | 60 |
| Coleoptera | Scarabaeidae | *Phileurus* | **sipi curu mama** | 358 |
| Coleoptera | Scarabaeidae | *Phileurus didymus* Linnaeus | **caspi curu mama** | 138 |
| Coleoptera | Scarabaeidae | *Phileurus didymus* Linnaeus | **sipi curu mama** | 149 |
| Coleoptera | Scarabaeidae | *Strategus* | **chihuilla curu mama** | 347 |
| Coleoptera | Scarabaeidae | *Sulcophanaeus velutinus* Murray | **sicu mama** | 357 |
| Coleoptera | Scarabaeidae Cetoniinae | | **huasi curu mama** | 202 |
| Coleoptera | Scarabaeidae Rutelini | | **indillama curu mama** | 309 |
| Coleoptera | Staphylinidae | | **añangu caya mama** | 150 |
| Coleoptera | Staphylinidae Paedarinae | | **gainari mama** | 195 |
| Coleoptera | Staphylinidae Paederinae | | **candarira** | 139 |
| Coleoptera | Tenebrionidae | | **shundu** | 71 |
| Coleoptera | Tenebrionidae | | **caspi curu mama, yura cuchun** | 83 |
| Coleoptera | Tenebrionidae | | **caspi curu mama** | 88 |
| Coleoptera | Trogidae | *Trox* | **ushpa curu mama** | 406 |
| Coleoptera? | | | **huata curu** | 182 |
| Dermaptera | | | **taula curu mama** | 386 |

| | | | | |
|---|---|---|---|---|
| Diptera | | | **sanga** | 13 |
| Diptera | | | **bunbu** | 153 |
| Diptera | | | **cuchi chuspi** | 213 |
| Diptera | | | **ali chuspi** | 225 |
| Diptera | | | **huama sangudu, huama sanguru** | 227 |
| Diptera | | | **huama sangudu** | 228 |
| Diptera | | | **muru ñahui, muru ñahui chuspi** | 229 |
| Diptera | | | **huata curu** | 376 |
| Diptera | | | **callamba puta** | 397 |
| Diptera | | | **sahino chuspi** | 1 |
| Diptera | Asilidae | | **parutu dahuanu** | 253 |
| Diptera | Culicidae? | | **zancudu curaga, zanguru curaga** | 296 |
| Diptera | Otitidae | | **chunda curu mama** | 300 |
| Diptera | Pantophthalmidae | *Panthophthalmus* | **huagra dahuanu** | 242 |
| Diptera | Stratiomyidae | | **chunda curu mama** | 135 |
| Diptera | Syrphidae | | **veranu avispa** | 224 |
| Diptera | Tabanidae | | **dabanu** | 61 |
| Diptera | Tabanidae | | **yana dahuanu, mtuca** | 395 |
| Diptera | Tabanidae? | | **quipucha** | 187 |
| Diptera | Tachinidae? | | **irqui puta** | 207 |
| Hemiptera | Coreidae | | **sacha pacu** | 292 |
| Hemiptera | Coreidae | | **yana pacu** | 409 |
| Hemiptera | Coreidae | | **tahuacu pacu** | 383 |
| Hemiptera | Coreidae | | **pacu** | 25 |
| Hemiptera | Coreidae | | **pacu** | 43 |
| Hemiptera | Coreidae? | | **virdi jiji** | 264 |
| Hemiptera | Pentatomidae | | **quillu pacu** | 319 |
| Hemiptera | Pentatomidae | | **tahuacu pacu** | 359 |
| Hemiptera | Pentatomidae | *Edessa* | **sacha pacu, manchu** | 290 |
| Hemiptera | Pentatomidae | *Edessa* | **sacha pacu** | 298 |
| Hemiptera | Reduviidae | | **pacu** | 39 |
| Hemiptera | Reduviidae | | **sanga** | 159 |
| Hemiptera | Reduviidae | | **pacu** | 15 |
| Hemiptera | Reduviidae | | **rupai tamia añangu** | 31 |
| Homoptera | Cercopidae | | **lumu putsucu** | 354 |
| Homoptera | Cicadellidae | | **jiji** | 341 |
| Homoptera | Cicadidae | | **gya curu mama** | 189 |
| Homoptera | Cicadidae | | **giya mama** | 326 |
| Homoptera | Cicadidae | | **ichilla giya** | 400 |
| Homoptera | Cicadidae | | **giya curu mama** | 40 |
| Homoptera | Membracidae | *Membracis* | **rumi caspi curu mama** | 375 |
| Homoptera | Membracidae | *Umbonia* | [name unknown] | 180 |
| Homoptera Fulgoroidea | | | **tsuntsu curu mama** | 305 |
| Hymenoptera | | | **sicu avispa** | 237 |
| Hymenoptera | Anthophoridae | *Centris* | **curu mama** | 53 |
| Hymenoptera | Apidae | | **puca mishqui** | 87 |
| Hymenoptera | Apidae | | **chundarucu mishqui mama** | 340 |
| Hymenoptera | Apidae | *Eulaema* | **armadillu avispa** | 241 |
| Hymenoptera | Apidae | *Eulaema meriana* (Oliver) | **miru miru mama** | 231 |

| | | | | |
|---|---|---|---|---|
| Hymenoptera | Apidae | *Eulaema speciosa* (Mocsary) | **playa curu mama** | 214 |
| Hymenoptera | Apidae | *Eulaema speciosa* (Mocsary) | **quillusiqui curu mama** | 70 |
| Hymenoptera | Apidae | *Melipona* | **pungara** | 178 |
| Hymenoptera | Apidae | *Melipona* | **puca mishqui, puca mapa** | 183 |
| Hymenoptera | Apidae | *Melipona* | **puma mapa mama** | 377 |
| Hymenoptera | Apidae | *Melipona* | **puca mishqui** | 345 |
| Hymenoptera | Apidae | *Melipona* | **puca mapa** | 313 |
| Hymenoptera | Apidae | *Melipona* sp. a | **ushpa mapa mama** | 244 |
| Hymenoptera | Apidae | *Melipona* sp. a | **ushpa mapa mama** | 301 |
| Hymenoptera | Apidae | *Ptilotrigona* | **pungara mama** | 145 |
| Hymenoptera | Apidae | *Scaptotrigona* | **yana mishqui quillasapa, mishqui** | 65 |
| Hymenoptera | Apidae | *Scaptotrigona 'tricolorata'* | **limon mishqui** | 75 |
| Hymenoptera | Apidae | *Tetragona* | **cutu mapa** | 143 |
| Hymenoptera | Apidae | *Tetragona clavipes* (Fabricius) | **nina puta** | 130 |
| Hymenoptera | Apidae | *Tetragonisca angustula* Latreille | **utucu mishqui, comejin mapa** | 166 |
| Hymenoptera | Apidae | *Tetragonisca angustula* Latreille? | **yana caracha mishqui, yana caracha mapa** | 408 |
| Hymenoptera | Apidae | *Trigona branneri* Cockerell | **maicuri** | 176 |
| Hymenoptera | Apidae | *Trigona silvestriana* Vachal | **ingaru puta** | 236 |
| Hymenoptera | Apidae | *Trigona silvestriana* Vachal | **ingaru puta** | 294 |
| Hymenoptera | Apidae Euglossinae | | **virdi curu mama** | 276 |
| Hymenoptera | Apidae Euglossinae | | **sisa curu mama** | 371 |
| Hymenoptera | Apidae Euglossinae | | **miru miru mama** | 410 |
| Hymenoptera | Apidae Meliponini | | **pungara puta** | 38 |
| Hymenoptera | Apidae Trigonini | | **caballu puta** | 401 |
| Hymenoptera | Apidae Trigonini | | **puca mapa mama, puca mishqui** | 208 |
| Hymenoptera | Apidae Trigonini | | **yana mapa mama, yana mishqui mama** | 212 |
| Hymenoptera | Apidae Trigonini | | **jumbi llahua puta** | 407 |
| Hymenoptera | Apoidea | | **armadillu avispa** | 378 |
| Hymenoptera | Apoidea | | **miru miru mama** | 254 |
| Hymenoptera | Apoidea | | **miru miru mama** | 399 |
| Hymenoptera | Formicidae | | **cuica añangu** | 22 |
| Hymenoptera | Formicidae | | **ayangui** | 89 |
| Hymenoptera | Formicidae | | **taracuhua** | 116 |
| Hymenoptera | Formicidae | | **taracuhua** | 123 |
| Hymenoptera | Formicidae | | **ayangui** | 146 |
| Hymenoptera | Formicidae | | **caspi añangu** | 169 |
| Hymenoptera | Formicidae | | **taracuhua** | 179 |
| Hymenoptera | Formicidae | | **puca añangu, llushti añangu** | 184 |
| Hymenoptera | Formicidae | | **ushpa culyundu** | 270 |
| Hymenoptera | Formicidae | | **puca añangu** | 334 |
| Hymenoptera | Formicidae | | **cuica añangu** | 335 |
| Hymenoptera | Formicidae | | **ushpa culyundu** | 379 |
| Hymenoptera | Formicidae | | **yacu siqui añangu, apilla añangu** | 384 |

| | | | | |
|---|---|---|---|---|
| Hymenoptera | Formicidae | | **dundu añangu** | 172 |
| Hymenoptera | Formicidae | | **mundira yuturi** | 286 |
| Hymenoptera | Formicidae | | **pandu abiyu añangu** | 274 |
| Hymenoptera | Formicidae | | **upa taracuhua** | 311 |
| Hymenoptera | Formicidae | | **puca añangu** | 18 |
| Hymenoptera | Formicidae | *Acromyrmex* | **quisa mama** | 144 |
| Hymenoptera | Formicidae | *Acromyrmex* | **sica mama, tsica mama** | 8 |
| Hymenoptera | Formicidae | *Acromyrmex* | **tsica** | 194 |
| Hymenoptera | Formicidae | *Atta* | **añangu, ucui** | 16 |
| Hymenoptera | Formicidae | *Atta* | **ucui mama** | 269 |
| Hymenoptera | Formicidae | *Atta* | **yana mama, añangu, ucui** | 351 |
| Hymenoptera | Formicidae | *Atta* | **buhua** | 364 |
| Hymenoptera | Formicidae | *Atta* | **añangu, ucui** | 93b |
| Hymenoptera | Formicidae | *Atta* | **añangu, ucui** | 94 |
| Hymenoptera | Formicidae | *Camponotus* sp. a | **fichillu añangu, chilicres añangu** | 82 |
| Hymenoptera | Formicidae | *Camponotus* sp. b | **taracuhua** | 320 |
| Hymenoptera | Formicidae | *Camponotus* sp. c | **paju taracuhua** | 390 |
| Hymenoptera | Formicidae | *Camponotus* sp. d | **chuqui taracuhua** | 394 |
| Hymenoptera | Formicidae | *Cephalotes atratus* (Linnaeus) | **dundu añangu** | 42 |
| Hymenoptera | Formicidae | *Dolichoderus* | **taracuhua** | 4 |
| Hymenoptera | Formicidae | *Eciton burchelli* (Westw.) | **tamia añangu** | 404 |
| Hymenoptera | Formicidae | *Eciton burchellii* (Westw.) | **tamia añangu** | 134 |
| Hymenoptera | Formicidae | *Eciton rapax* Smith | **tamia añangu** | 47 |
| Hymenoptera | Formicidae | *Eciton rapax* Smith | **tamia añangu** | 193 |
| Hymenoptera | Formicidae | *Eciton* | **rupai tamia añangu** | 205 |
| Hymenoptera | Formicidae | *Eciton* | **upa tamia añangu** | 24 |
| Hymenoptera | Formicidae | *Ectatomma* | **yacami añangu** | 129 |
| Hymenoptera | Formicidae | *Odontomachus* | **c$^{h}$uliundu, tilin** | 190 |
| Hymenoptera | Formicidae | *Odontomachus* | **c$^{h}$uliundu** | 12 |
| Hymenoptera | Formicidae | *Odontomachus* | **c$^{h}$uliundu** | 204 |
| Hymenoptera | Formicidae | *Oligomyrmex* | **isma añangu** | 21 |
| Hymenoptera | Formicidae | *Pachycondyla* sp. a | **c$^{h}$uliundu** | 9 |
| Hymenoptera | Formicidae | *Pachycondyla* sp. b | **jatun c$^{h}$uliundu** | 238 |
| Hymenoptera | Formicidae | *Pachycondyla* sp. c | **dzila añangu** | 247 |
| Hymenoptera | Formicidae | *Paraponera* | **quillu maqui yuturi** | 388 |
| Hymenoptera | Ichneumonidae | | **ushula** | 346 |
| Hymenoptera | Mutillidae | | **name not known** | 268 |
| Hymenoptera | Pompilidae | *Pepsis* | **tuhui, tuvi** | 333 |
| Hymenoptera | Pompilidae | *Pepsis* | **runa pamba** | 170 |
| Hymenoptera | Pompilidae | *Pepsis* | **parutu curu mama** | 314 |
| Hymenoptera | Pompilidae | *Pepsis* | **runa pamba** | 392 |
| Hymenoptera | Sphecidae | *Dynatus* | **jahua armadillo avispa** | 389 |
| Hymenoptera | Sphecidae ? | | **alpa allana curu mama runa pamba** | 41 |
| Hymenoptera | Vespidae | | **ushula** | 203 |
| Hymenoptera | Vespidae | | **sicu avispa** | 226 |
| Hymenoptera | Vespidae | | **panga avispa** | 250 |
| Hymenoptera | Vespidae | | **ushula** | 261 |
| Hymenoptera | Vespidae | | **quilla ahuispa** | 278 |
| Hymenoptera | Vespidae | | **ichila ushula** | 373 |
| Hymenoptera | Vespidae | | **quillu avispa** | 317 |
| Hymenoptera | Vespidae | | **quillu shushuti,** | 210 |

| | | | | |
|---|---|---|---|---|
| | | | **quillu avispa** | |
| Hymenoptera | Vespidae | | **quillu shushuti, quillu avispa** | 211 |
| Hymenoptera | Vespidae | *Protopolybia amarella* Bequaert | **abiyu ahuispa** | 127 |
| Hymenoptera | Xylocopidae | *Xylocopa* | **curu mama** | 140 |
| Hymenoptera | Xylocopidae | *Xylocopa* | **jatun miru miru mama** | 265 |
| Hymenoptera | Xylocopidae ? | | **curu mama** | 52 |
| Isoptera | | | **tanaqui** | 17 |
| Isoptera | Nasutitermitidae | *Nasutitermes* | **ichilla comejin** | 76 |
| Isoptera | Nasutitermitidae | *Nasutitermes* | **comiji** | 393 |
| Lepidoptera | | | **panga curu** | 177 |
| Lepidoptera | | | **playa mariposa** | 255 |
| Lepidoptera | | | **puma mariposa** | 257 |
| Lepidoptera | | | **ishpa mariposa, ishpallahua** | 258 |
| Lepidoptera | | | **pacai mariposa** | 263 |
| Lepidoptera | | | **quindi mariposa** | 267 |
| Lepidoptera | | | **puma mariposa** | 273 |
| Lepidoptera | | | **quihua mariposa** | 281 |
| Lepidoptera | | | **yura mariposa** | 282 |
| Lepidoptera | | | **vicente** | 306 |
| Lepidoptera | | | **rumi mariposa** | 328 |
| Lepidoptera | | | **panga mariposa** | 331 |
| Lepidoptera | | | **lumu chini curu** | 336 |
| Lepidoptera | | | **pasu chini curu** | 344 |
| Lepidoptera | | | **ishpa mariposa** | 368 |
| Lepidoptera | | | **ilqui mariposa** | 104 |
| Lepidoptera | Arctiidae | | **cutu chini curu** | 308 |
| Lepidoptera | Arctiidae | | **tsitsín chini curu** | 332 |
| Lepidoptera | Arctiidae | | **quindi mariposa** | 73 |
| Lepidoptera | Geometridae | | **palmu curu** | 106 |
| Lepidoptera | Geometridae? | | **lumu curu, palma curu** | 165 |
| Lepidoptera | Hesperiidae | | **yana mariposa** | 325 |
| Lepidoptera | Megalopygidae | | **indillama chini curu** | 188 |
| Lepidoptera | Megalopygidae | | **cutu chini curu** | 342 |
| Lepidoptera | Megalopygidae | | **indillama chini curu, aula puchu** | 405 |
| Lepidoptera | Nymphalidae | *Catagramma* | **numeruyu maripusa** | 322 |
| Lepidoptera | Saturniidae | | **palma curu** | 173 |
| Mantodea | | | **apu huahua** | 11 |
| Mantodea | | | **huangana caya** | 99 |
| Mantodea | | | **sacha apu** | 131 |
| Mantodea | | | **no name** | 201 |
| Mantodea | | | **apu** | 307 |
| Mantodea | Acanthopidae | *Acanthops* | **apu** | 141 |
| Mantodea | Mantidae | | **apu** | 167 |
| Odonata Anisoptera | | | **rumi usa** | 181 |
| Odonata Zygoptera | | | **yacu shanga** | 280 |
| Odonata Zygoptera | | | **cedro supai** | 297 |
| Odonata Zygoptera | | | **manduru caspi** | 310 |

| | | | |
|---|---|---|---|
| Odonata Zygoptera | | **yacu shanga** | 302 |
| Odonata Zygoptera | | **yacu shanga, yacu sanga** | 209 |
| Orthoptera | | **sardina jiji, huandu jiji** | 114 |
| Orthoptera | | **puma jiji** | 142 |
| Orthoptera | | **puma jiji** | 251 |
| Orthoptera | | **taslla cara jiji** | 272 |
| Orthoptera | Acridoidea | **puma jiji** | 62 |
| Orthoptera | Acridoidea | **quihua jiji** | 37 |
| Orthoptera | Acridoidea | **yana jiji** | 40 |
| Orthoptera | Acridoidea | **puma jiji** | 66 |
| Orthoptera | Acridoidea | **chundarucu jiji** | 97 |
| Orthoptera | Acridoidea | **soldadu jiji** | 98 |
| Orthoptera | Acridoidea | **shalya chaqui jiji** | 100 |
| Orthoptera | Acridoidea | **indi jiji** | 101 |
| Orthoptera | Acridoidea | **yana shimi jiji** | 105 |
| Orthoptera | Acridoidea | **apinuisiqui jiji** | 110 |
| Orthoptera | Acridoidea | **muru ñahui jiji** | 117 |
| Orthoptera | Acridoidea | **jiji** | 119 |
| Orthoptera | Acridoidea | **mucu changa jiji** | 120 |
| Orthoptera | Acridoidea | **yana shimi jiji** | 121 |
| Orthoptera | Acridoidea | **mucu uma jiji** | 122 |
| Orthoptera | Acridoidea | **puma jiji** | 217 |
| Orthoptera | Acridoidea | **puca chaqui jiji** | 33 |
| Orthoptera | Acridoidea | **puma jiji** | 252 |
| Orthoptera | Acridoidea | **taula jiji** | 10 |
| Orthoptera | Acridoidea | **taslla cara jiji** | 372 |
| Orthoptera | Gryllidae | **huasi jiji** | 34 |
| Orthoptera | Gryllidae | **aya martillu** | 80 |
| Orthoptera | Gryllidae | **pullu changa tiambicu** | 109 |
| Orthoptera | Gryllidae | **yana jiji** | 234 |
| Orthoptera | Gryllidae | **yana jiji** | 235 |
| Orthoptera | Tettigonioidea | **araña jiji** | 5 |
| Orthoptera | Tettigonioidea | **sardina jiji** | 6 |
| Orthoptera | Tettigonioidea | **yura jiji** | 7 |
| Orthoptera | Tettigonioidea | **jahua jiji** | 92 |
| Orthoptera | Tettigonioidea | **sardina jiji** | 102 |
| Orthoptera | Tettigonioidea | **pullu chupa jiji** | 107 |
| Orthoptera | Tettigonioidea | **shalya chupa jiji** | 108 |
| Orthoptera | Tettigonioidea | **chiquiri jiji** | 112 |
| Orthoptera | Tettigonioidea | **shungu jiji** | 113 |
| Orthoptera | Tettigonioidea | **panga jiji** | 118 |
| Orthoptera | Tettigonioidea | **chiquiri jiji, sacha jiji** | 174 |
| Orthoptera | Tettigonioidea | **chiquiri jiji** | 186 |
| Orthoptera | Tettigonioidea | **chiquiri jiji** | 196 |
| Orthoptera | Tettigonioidea | **yura jiji** | 197 |
| Orthoptera | Tettigonioidea | **jandia jiji** | 199 |
| Orthoptera | Tettigonioidea | **rayu jiji** | 215 |
| Orthoptera | Tettigonioidea | **ali jandya jiji** | 216 |
| Orthoptera | Tettigonioidea | **sardina jiji** | 218 |
| Orthoptera | Tettigonioidea | **panga jiji** | 291 |
| Orthoptera | Tettigonioidea | **huamani jiji** | 312 |

| | | | |
|---|---|---|---|
| Orthoptera | Tettigonioidea | **sardina jiji, jandya jiji** | 315 |
| Orthoptera | Tettigonioidea | **quillu jiji** | 299 |
| Orthoptera | Tettigonioidea | **andia jiji** | 2 |
| Phasmatoptera | | **shanga** | 289 |
| Phasmatoptera | Phasmidae | **shanga, ñahui ishpa** | 260 |
| Phasmatoptera | Phasmidae | **shanga, ñahui ishpa, manchu** | 262 |
| Phasmatoptera | Phasmidae | **sanga** | 148 |
| Phasmatoptera | Phasmidae | **shanga** | 151 |
| Undetermined | | **putsucu mama, lumu putsucu mama** | 26 |
| Undetermined | | **manduru caspi** | 29 |
| Undetermined | | **yana curu mama** | 72 |
| Undetermined | | **tiliy** | 111 |
| Undetermined | | **chunda curu mama, verdi curu mama** | 223 |
| Undetermined | | **shuyu muru** | 256 |
| Undetermined | | **baita chini curu mama** | 295 |
| Undetermined | | **no name** | 318 |
| Undetermined | | **biqhuata curu mama** | 367 |
| Undetermined | | **runa curu** | 398 |
| Undetermined | | **chini curu** | 32 |
| Undetermined | | **pangurapa usa** | 77 |

**Class: Arachnida (Spiders, Ticks, Mites, Scorpions)**

| **Order Sub-Order** | **Super-Family Family Sub-Family Tribe** | **Genus Species** | **Common Name** | **Coll. No.** |
|---|---|---|---|---|
| Araneae | | | **dumbiqui araña** | 103 |
| Araneae | | | **huasi ariana** | 81 |
| Araneae | | | **machin araña, cutu araña** | 133 |
| Araneae | | | **machin ariana** | 198 |
| Araneae | | | **ichila chambira ariana** | 221 |
| Araneae | | | **machin ariana** | 279 |
| Araneae | | | **chambira ariana** | 284 |
| Araneae | | | **chambira ariana** | 285 |
| Araneae | | | **ichilla yacu ariana** | 316 |
| Araneae | | | **quillu ariana** | 324 |
| Araneae | | | **rumi ariana** | 329 |
| Araneae | | | **chambira ariana** | 330 |
| Araneae | | | **mundu ariana** | 337 |
| Araneae | | | **barisa ariana** | 343 |
| Araneae | | | **rayu ariana** | 352 |
| Araneae | | | **barisa ariana** | 382 |
| Araneae | | | **quillu maqui barisa ariana** | 412 |
| Araneae Mygalomorphae | | | **yacu ariana, pangura ariana,chorongo ariana** | 162 |
| Araneae Mygalomorphae | | | **huacai siqui ariana** | 243 |
| Araneae Mygalomorphae | | | **tapia ariana, maquisapa ariana** | 403 |
| Metastigmata | | | **mundira garapata,** | 154 |

| | | | | |
|---|---|---|---|---|
| | | | **mundiran garapata** | |
| Metastigmata | | | **ali garapata, alin garapata** | 155 |
| Metastigmata | | | **huagra arapata** | 396 |
| Scorpionida | Buthidae | Tityus | **ililinchi, alacrán** | 96 |
| Scorpionida | Buthidae | *Tityus* | **puca ililinchi** | 160 |
| Scorpionida | Buthidae | *Tityus* | **puca ililinchi** | 163 |
| Scorpionida | Buthidae | *Tityus* | **puca ililinchi** | 220 |
| Scorpionida | Buthidae | *Tityus* | **cushillu ililinchi** | 230 |
| Scorpionida | Buthidae | *Tityus?* | **yana ililinchi** | 191 |
| Scorpionida | Chactidae | *Teuthraustes* | **cushillu ililinchi, yana ililinchi** | 219 |

# Appendix Four
# Collected Fishes

Many of my fish collections have been misplaced in the zoology museum of the Escuela Nacional Politécnica, Quito. Misplaced specimens are indicated with an asterisk after the collection number. In many cases I assign tentative scientific names for these following Irvine (1987). In general, I follow Irvine in my classification. Her data is from San José de Payamino which is very close to Ávila and ethnobiological nomenclature and classification is almost identical.

| **Order** | **Family** | **Genus Species** | **Common Name** | **Coll. No.** |
|---|---|---|---|---|
| Characiformes | Characidae | | **sardina** | 5* |
| Characiformes | Characidae | *Brycon* cf. *melanopterus* | **jandia** | Photo |
| Characiformes | Characidae | *Charax tectifer* | **llausa challihua, tuta pishcu challihua, quincha shaya, esquina shaya** | 21 |
| Characiformes | Characidae | *Creagratus* | **humucu** | 8* |
| Characiformes | Characidae | *Moenkhausia naponis* | **tahuaqui** | 12* |
| Characiformes | Characidae | *Salminus hilarii* | **quiruyu huahua** | Photo |
| Characiformes | Characidae | *Salminus hilarii* | **quiruyu** | Photo |
| Characiformes | Curimatidae | *Steindachnerina dobula* | **cunchi** | 26 |
| Characiformes | Hemiodidae | | **canashi** | 3* |
| Characiformes | Lebiasinidae | *Lebiasina* | **huili** | 11* |
| Characiformes | Prochilodontidae | *Prochilodus nigricans* | **challua, chalihua** | Photo |
| Characiformes? | | | **sihui** | 9* |
| Characiformes? | | | **umaranda** | 20* |
| Cyprinodontiformes | Cichlidae | *Crenicichla* | **puca ñahui** | 6* |
| Cyprinodontiformes? | | | **yana puca ñahui** | 16* |
| Gymnotiformes | Apteronotidae | *Apteronotus albifrons* | **ahuanga, yumbi** | 23 |
| Siluriformes | Callichthyidae | *Hoplosternum thoracantum* | **tsucu tsucu caracha, tiricu** | |
| Siluriformes | Cetopsidae | *Pseudocetopsis* | **ñausa** | 7* |
| Siluriformes | Gymnotoidea | *Gymnotus* | **atata** | 18* |
| Siluriformes | Loricariidae | | **carachama** | 1* |
| Siluriformes | Loricariidae | | **yana carachama** | 14* |
| Siluriformes | Loricariidae | | **sagra carachama** | 15* |
| Siluriformes | Loricariidae | | **caracha** | 28 |
| Siluriformes | Loricariidae | *Chaetostoma dermorynchon* | **ali carachama, quillu carachama** | 22 |
| Siluriformes | Loricariidae | *Cheatostoma* | **shiquitu, carachama** | 19* |
| Siluriformes | Loricariidae | *Hypostomus*? | **tupungu** | Photo |
| Siluriformes | Loricariidae | *Loricaria* cf. *cataphraeta* | **chunda caracha** | 30 |
| Siluriformes | Pimelodidae | *Imparfinis* | **yahuar linguisu, llambu nangui, asu** | 25 |
| Siluriformes | Pimelodidae | *Nannorhamdia* | **llambu tucsi** | 27 |
| Siluriformes | Pimelodidae | *Pimelodella* | **tucsi** | 13* |

| | | | | |
|---|---|---|---|---|
| Siluriformes? | | | **llambiru, yambiru** | 2* |
| Siluriformes? | | | **llinguisu, linguisu** | 4* |
| Siluriformes? | | | **llambu tucsi** | 10* |
| Symbranchiformes | Symbranchidae | *Symbranchus marmoratus* | **chunda quishpina, atata machacui, yayu machacui** | 31 |
| Undetermined | | | **yavisu** | 17* |
| Undetermined | | | **chiri muyu** | 24 |
| Undetermined | | | **shashacu, huaira challuhua** | 29 |

# Appendix Five
# Collected Herpetofauna (Reptiles and Amphibians)

**Class Reptilia**

**Order Crocodylia (Crocodiles, Caimans)**

| Family | Genus Species | Common Name | Coll. No. |
|---|---|---|---|
| Crocodylidae | *Paleosuchus* | **casha lagartu** | 56 |
| Crocodylidae | *Paleosuchus* | **lagartu, palu** | 25 |

**Subclass Anapsida**

**Order Testudines (Turtles)**

| Family | Genus Species | Common Name | Coll. No. |
|---|---|---|---|
| Testudinidae | *Chelonoidis denticulata* (Linnaeus) | **yahuati** | Photo |
| Testudinidae | *Chelonoidis denticulata* (Linnaeus) | **huagra yahuati** | 91 |
| Chelidae | *Platemys platycephala* Schneider | **cupisu** | Photo |
| Chelidae | *Platemys platycephala* Schneider | **uchu charapa, asna cupisu, chinchi charapa** | 47 |

**Subclass Lepidosauria**

**Order Squamata**

**Suborder Sauria (Lizards)**

| Family | Genus Species Subspecies | Common Name | Coll. No. |
|---|---|---|---|
| Gekkonidae | *Thecadactylus rapicauda* (Houttuyn) | **alamanguisa** | 7 |
| Gekkonidae | *Thecadactylus rapicauda* (Houttuyn) | **alamanguisa, huata huata** | 69 |
| Gymnophthalmidae | *Arthrosaura reticulata* (O' Shaughnessy) ? | **sacha tyalangu** | 76 |
| Gymnophthalmidae | *Neusticurus ecpleopus* Cope | **tyalangu** | 64 |
| Polychrotidae | *Anolis fuscoauratus fuscoauratus* D' Orbigny | **palu indiricu** | 4 |
| Polychrotidae | *Anolis nitens scypheus* Cope | **urcu palu, caspi palu, indi ricu palu** | 20 |
| Polychrotidae | *Polychrus liogaster* Boulenger | **luna burachi palu** | 39 |
| Tropiduridae | *Plica umbra ochrocollaris* (Spix) | **palu, tutipa** | 31 |
| Undetermined | | **virdi palu, urcu palu** | 9 |

**Suborder Amphisbaenia (Worm Lizards)**

| Family | Genus Species Subspecies | Common Name | Coll. No. |
|---|---|---|---|
| Amphisbaenidae | *Amphisbaena fuliginosa bassleri* Vanzolini | **tapia machacui, ushpa machacui, cielu machacui** | 42 |

**Suborder Ophidia (Snakes)**

| Family | Genus Species Subspecies | Common Name | Coll. No. |
|---|---|---|---|
| Boidae | *Boa* ? | **pishcu amarun** | 57 |
| Boidae | *Boa constrictor constrictor* Linnaeus | **turu amarun** | Photo |
| Boidae | *Epicrates cenchria cenchria* (Linnaeus) | **baruchi** | 86 |
| Boidae | *Epicrates cenchria cenchria* (Linnaeus) | **baruchi, ucumbi** | 75 |
| Colubridae | | **lumu machacui** | 63 |
| Colubridae | *Atractus elaps* (Günther) | **huitu machacui** | 46 |
| Colubridae | *Atractus elaps* (Günther) | **yana huitu machacui** | 88 |
| Colubridae | *Atractus occipitoalbus* (Jan) | **alpa machacui, lumu machacui** | 8 |
| Colubridae | *Chironius* | **ismuchi yacu machacui** | 60 |
| Colubridae | *Chironius* | **sucuriyu machacui** | 87 |
| Colubridae | *Chironius carinatus* Linnaeus | **huaira machacui** | 11 |
| Colubridae | *Chironius scurrulus* (Wagler) | **guta machacui** | 35 |
| Colubridae | *Chironius scurrulus* (Wagler) | **huaira machacui** | 5 |
| Colubridae | *Chironius scurrulus* (Wagler) | **huaira machacui** | 28 |
| Colubridae | *Clelia clelia* (Daudin) | **huacamaya machacui** | 49 |
| Colubridae | *Clelia clelia* (Daudin)? | **huacamaya machacui** | 71 |
| Colubridae | *Dipsas catesbyi* (Sentzen) | **huama machacui** | 32 |
| Colubridae | *Drymobius rhombifer* (Günther) | **jahua yacu machacui** | 59 |
| Colubridae | *Erythrolamprus aesculapii aesculapii* (Linnaeus) | **manduru machacui** | 13 |
| Colubridae | *Leptodeira annulata annulata* (Linnaeus) | **jatun ñabi machacui** | 79 |
| Colubridae | *Oxybelis argenteus* (Daudin) | **pucuna machacui** | 45 |
| Colubridae | *Oxyrhopus formosus* (Wied) | **huacamaya machacui** | 48 |
| Colubridae | *Oxyrhopus melanogenys* (Tschudi) ? | **yutu machacui** | 10 |
| Colubridae | *Oxyrhopus petola digitalis* (Reuss) | **irqui machacui, huama machacui** | 43 |
| Colubridae | *Pseustes poecilonotus polylepis* (Peters) | **huaira machacui** | 19 |
| Colubridae | *Tripanurgos compressus* Daudin | **irqui machacui** | 29 |
| Colubridae | *Tripanurgos compressus* Daudin | **irqui machacui** | 30 |
| Elapidae | *Micrurus* | **manduru machacui** | 74 |
| Elapidae | *Micrurus narduccii melanotus* Jan | **huitu machacui** | 77 |
| Viperidae | *Bothriopsis bilineata* Wied | **ushpa lura machacui** | 58 |
| Viperidae | *Bothriopsis taeniata* (Wagler) | **istrilla machacui** | 16 |
| Viperidae | *Bothriopsis taeniata* (Wagler) | **sicha machacui** | 55 |
| Viperidae | *Bothrops atrox* (Linnaeus) | **ardilla machacui, shishin, hoja podrida** | 37 |
| Viperidae | *Bothrops atrox* (Linnaeus) | **yacu machacui, pitalala** | 40 |
| Viperidae | *Bothrops atrox* (Linnaeus) | **yana yacu machacui** | 72 |
| Undetermined | | **guta machacui** | 26 |

| | | |
|---|---|---|
| Undetermined | **huama machacui, paririhua machacui, irqui machacui** | 78 |
| Undetermined | **jahua machacui** | 61 |

**Class Amphibia**

**Order Anura (Frogs and Toads)**

| **Family** | **Genus Species** | **Common Name** | **Coll. No.** |
|---|---|---|---|
| Bufonidae | *Bufo "margaritifer"* Laurenti | **dequere** | 3 |
| Bufonidae | *Bufo "margaritifer"* Laurenti | **mutsui dequiri, mutsuin dequere** | 85 |
| Bufonidae | *Bufo "margaritifer"* Laurenti | **uchu cara** | 53 |
| Bufonidae | *Bufo glaberrimus* Günther | **tilele** | 17 |
| Bufonidae | *Bufo marinus* Linnaeus | **telili, tulumba** | 38 |
| Bufonidae | *Bufo marinus* Linnaeus | **yacu tilimba** | 2 |
| Bufonidae | *Rhamphophryne* | **diquiri** | 36 |
| Bufonidae | *Rhamphophryne* | **uchu cara** | 33 |
| Dendrobatidae | *Colostethus bocagei* Jiménez de la Espada | **juiciu jambatu** | 62 |
| Dendrobatidae | *Colostethus bocagei* Jiménez de la Espada | **yacu telele** | 84 |
| Dendrobatidae | *Epipedobates bilinguis* Jungfer | **sacha telele** | 65 |
| Hylidae | *Hyla geographica* Spix | **atya** | 15 |
| Hylidae | *Hyla geographica* Spix | **machin gunahuaru** | 18 |
| Hylidae | *Hyla geographica* Spix | **maculla** | 70 |
| Hylidae | *Hyla geographica* Spix | **yana rusu** | 50 |
| Hylidae | *Hyla geographica* Spix | **yana rusu mama** | 90 |
| Hylidae | *Hyla geographica* Spix | **yana rusu mama** | 51 |
| Hylidae | *Hyla geographica* Spix | **yana rusu mama** | 52 |
| Hylidae | *Hyla geographica* Spix | **yana rusu mama, culu** | 41 |
| Hylidae | *Hyla phyllognatha* Melin | **yana rusu mama** | 27 |
| Hylidae | *Osteocephalus planiceps* Cope | **atya** | 24 |
| Leptodactylidae | *Eleutherodactylus* | **atya huahua** | 14 |
| Leptodactylidae | *Eleutherodactylus* | **cucha jambatu, cucha ambatu** | 6 |
| Leptodactylidae | *Eleutherodactylus croceoinguinis* Lynch | **sagra nuhua** | 66 |
| Leptodactylidae | *Eleutherodactylus nigrovittatus* Andersson | **guingui** | 83 |
| Leptodactylidae | *Eleutherodactylus nigrovittatus* Andersson | **guingui huahua** | 22 |
| Leptodactylidae | *Eleutherodactylus nigrovittatus* Andersson | **palta mama** | 68 |
| Leptodactylidae | *Eleutherodactylus nigrovittatus* Andersson | **yacu tilele** | 54 |
| Leptodactylidae | *Eleutherodactylus ockendeni* Boulenger | **guingui** | 67 |
| Leptodactylidae | *Eleutherodactylus ockendeni* Boulenger | **guingui** | 81 |
| Leptodactylidae | *Eleutherodactylus ockendeni* Boulenger | **guingui** | 82 |
| Leptodactylidae | *Eleutherodactylus peruvianus* Melin | **bahui** | 12 |
| Leptodactylidae | *Leptodactylus wagneri* Peters | **bahui** | 21 |
| Leptodactylidae | *Lithodytes lineatus* Schneider | **añangu caya mama** | 73 |
| Leptodactylidae | *Lithodytes lineatus* Schneider | **atya** | 89 |
| Undetermined | | **atya** | 1 |

**Order Gymnophiona (Legless Amphibia)**

| **Family** | **Genus Species** | **Common Name** | **Coll. No.** |
|---|---|---|---|
| Caeciliidae | *Caecilia* | **yamba, iluli** | 44 |
| Caeciliidae | *Caecilia tentaculata* Linnaeus | **yamba, la ciega** | 23 |

# Appendix Six
# Collected Mammals

| Order | Family | Genus Species | Common Name | Coll. No. |
|---|---|---|---|---|
| Artiodactyla | Cervidae | *Mazama* | **chundarcu, venado, taruga** | 15 |
| Artiodactyla | Cervidae | *Mazama americana* | **chundarcu** | 53 |
| Artiodactyla | Cervidae | *Mazama americana* | **chundarcu, venado, taruga** | 14 |
| Artiodactyla | Cervidae | *Mazama americana* | **chundárucu** | 21 |
| Artiodactyla | Tayassuidae | *Pecari tajacu* | **quirihua cuchi** | 52 |
| Artiodactyla | Tayassuidae | *Pecari tajacu* | **sahinu, lumu cuchi, urcu sahino** | 4 |
| Artiodactyla | Tayassuidae | *Pecari tajacu* | **sahinu, lumu cuchi, urcu sahino** | 5 |
| Carnivora | Felidae | *Leopardus* | **inchij puma, inchij pila, pacai puma** | 22 |
| Carnivora | Felidae | *Leopardus pardalis* | **puma** | 33 |
| Carnivora | Felidae | *Leopardus wiedii* | **inchi puma, yura nigri** | 51 |
| Carnivora | Felidae | *Panthera onca* | **jatun muru puma** | 9 |
| Carnivora | Mustelidae | *Eira barbara* | **pandu** | 24 |
| Carnivora | Mustelidae | *Eira barbara* | **pandu** | 47 |
| Carnivora | Mustelidae | *Lontra longicaudis* | **pishña** | 41 |
| Carnivora | Mustelidae | *Lontra longicaudis* | **pishña, pishiña** | 8 |
| Carnivora | Procyonidae | *Bassaricyon alleni* | **bipallashcu, huasca cushillu** | 22 |
| Carnivora | Procyonidae | *Nasua nasua* | **mashu** | 18 |
| Carnivora | Procyonidae | *Nasua nasua* | **mashu curaga** | 42 |
| Carnivora | Procyonidae | *Nasua nasua* | **mashu, cuchuchu** | 2 |
| Carnivora | Procyonidae | *Potos flavus* | **cushillu, yura cushillu** | 10 |
| Carnivora | Procyonidae | *Potos flavus* | **yura cushillu** | 32 |
| Carnivora | Procyonidae | *Potus flavus* | **yura cushillu** | 38 |
| Carnivora | Procyonidae | *Procyon cancrivorous* | **churu puma** | 26 |
| Carnivora | Ursidae | *Tremarctos ornatus* | **usu, pandu usu, yana usu, oso** | 43 |
| Marsupialia | Didelphidae | | **chuscu ñahui, quilapa** | 35 |
| Marsupialia | Didelphidae | *Marmosa rubra* | **chuscu ñahui, palanda ucucha** | 34 |
| Marsupialia | Didelphidae | *Marmosops noctivagus* | **palanda ucucha** | 37 |
| Marsupialia | Didelphidae | *Marmosops noctivagus* | **palanda ucucha, quilapa** | 56 |
| Marsupialia | Didelphidae | *Marmosops noctivagus?* | **palanda ucucha** | 40 |
| Marsupialia | Didelphidae | *Philander?* | **ichila cusumba, cushillu ucucha** | 6 |
| Perissodactyla | Tapiridae | *Tapirus terrestris* | **huagra, sacha huagra** | 11 |
| Primates | Cebidae | *Alouatta seniculus* | **cutu** | 59 |
| Primates | Cebidae | *Aotus* | **macuru, macuchi** | 45 |
| Primates | Cebidae | *Aotus* | **macuru, pundyu** | 39 |
| Primates | Cebidae | *Cebus* | **machín** | 44 |
| Primates | Cebidae | *Cebus* | **machín** | 50 |
| Primates | Cebidae | *Cebus* | **yura machin** | 58 |
| Primates | Cebidae | *Lagothrix lagotricha* | **churungu, munu** | 3 |
| Primates | Cebidae | *Lagothrix lagotricha* | **churungu** | 13 |

| | | | | |
|---|---|---|---|---|
| Rodentia | Agoutidae | *Agouti paca* | **huanta, lumucha** | 16 |
| Rodentia | Dasyproctidae | *Dasyprocta fuliginosa* | **sicu** | 19 |
| Rodentia | Dasyproctidae | *Dasyprocta fuliginosa* | **sicu** | 17 |
| Rodentia | Dasyproctidae | *Dasyprocta fuliginosa* | **sicu** | 27 |
| Rodentia | | | **lumucha ucucha** | 36 |
| Rodentia | Dasyproctidae | *Myoprocta* | **papali** | 20 |
| Rodentia | Hydrochaeridae | *Hydrochaeris hydrochaeris* | **capihuara** | 25 |
| Rodentia | Muridae | *Akodon aerosus* | **yura chaqui** | 55 |
| Rodentia | Muridae | *Melanomys caliginosus* | **yana tindi** | 30 |
| Rodentia | Muridae | *Oecomys bicolor* | **sara ucucha, huasi ucucha** | 54 |
| Rodentia | Sciuridae | *Sciurus* | **jatun ali ardilla** | 12 |
| Xenarthra | Dasypodidae | *Cabassous unicinctus* | **jusimbu, usimbu** | 48 |
| Xenarthra | Dasypodidae | *Dasypus kappleri* | **armadillu, huachicambu** | 28 |
| Xenarthra | Dasypodidae | *Dasypus kappleri* | **atu rima** | 49 |
| Xenarthra | Dasypodidae | *Dasypus novemcinctus* | **armadillu, huachicambu, cachicambu** | 23 |
| Xenarthra | Myrmecophagidae | *Tamandua tetradactyla* | **susu** | 7 |
| Xenarthra | Myrmecophagidae | *Tamandua tetradactyla* | **susu** | 46 |
| Undetermined | | | **lumucha ucucha** | 29 |

# Endnotes

[1] The term Quichua is commonly used in Ecuador to refer to that country's dialects of Quechua.

[2] **Yacu** means river in Quichua

[3] In order to make this beer, the manioc roots just above the tubers are harvested and charred. These are then piled on racks in the forest and covered with leaves. After a few days, a cosmopolitan mold known as **puca alyu** (*Neurospora crassa*) begins to grow on these. The spores of these, which form a dusty bright orange powder, are collected and placed in gourds that are then placed on smoking racks (**mandaca**) over the cooking fires where they will stay slightly above ambient temperature and hence viable for long periods of time. Manioc tubers are then harvested and roasted on large racks in the garden, without peeling them. These are then brought inside and placed in low piles on the ground. Women will sprinkle the fungal spores on these piles and then cover them for a few days with plantain leaves. They will then peel them and crumble them, sometimes chewing on them; saliva, like the action of the mold, breaks down complex carbohydrates into simple sugars that can then easily ferment. The women will then add some water so that the mix becomes pastier and they will place this in large containers –today usually large plastic garbage cans. At the bottom of these containers they place a wooden supportive structure and then line these with leaves. They put the manioc dough in these to ferment. Beer is made out of this dough –each bowlful being mixed individually with water before it is served. In addition, a stronger form of alcohol, known as **vinillu** (from the Spanish *vino*, wine) is gathered as liquid drips through the leaves to the space made by the wooden structure below.

[4] Traditional houses in Ávila are undivided. If there is only one division, it will usually be a small room made by an adolescent son. Luis' house was somewhat unusual by Ávila standards in that the parents also had a bedroom.

[5] **Rumana** is equivalent to the highland Quichua verb **urmana**, to fall.

[6] This term is often used as a general gloss for hunting but it also refers to a static hunting technique that consists of waiting for game from within a hunting blind (**chapana**) that has been temporarily erected beside a fruiting tree.

[7] His father was less surprised. From the sound the gun made when it was fired he knew that his son had shot at

something on the ground and not up in the trees.

[8] For the sake of clarity I am simplifying the argument. In Ávila Quichua there are exceptions to the rule of stressing the penultimate syllable. If a suffix is suppressed –as often happens in casual speech– the stress is usually left as if the suppressed suffix were still being pronounced. For example, when Maxi says, "**yuyarí- shayani**" he suppresses the clause chaining verbal suffix "**-sa.**" If this had not been suppressed the phrase would have scanned, "**yuyarísa shayani**." In Ávila Quichua it is also quite common to place stress on the final syllable, instead of the penultimate, in cases in which the third person plural marker –**nun** is used (e.g., **shamunún**). This seems to be related to historical changes in the Ávila dialectic of Quichua. An early colonial Jesuit missionary grammar signals that the third person plural marker that was used (or promulgated) at that time in the Quito region was –**ncuna** (Dedenbach-Salazar Sáenz 1993:84). Following the standard Quechua pattern, it would receive stress on the penultimate syllable (e.g., **shamuncúna**). Although in modern highland Ecuadorian dialects of Quichua there is no longer a lexical differentiation between the third person singular and plural –both are marked by –**n**– the Pastaza dialect of lowland Quichua uses both –**nguna** and its contraction –**naun** as third person plural markers. The accent on the contracted form is on the final syllable as if it had not been contracted (Orr 1978: 11-12). It seems that the third person marker in Ávila Quichua is a derivation of this disyllabic suffix whose final syllable has eroded; this is why the word to which it is attached retains the stress as if this additional syllable were still there. Therefore, in Maxi's narrative, the phrase **a–sh–ca shamunún** only becomes "marked" in the context of the preceding one, **ú'–nailla car-.** Here, the unusual stress pattern of the first phrase serves to highlight the marked quality of the second one.

[9] This should not be confused with the **te-y,** emphatically performed, which indicates that an animal was hit by shot (see Chapters Four and Nine).

[10] It is possible that this anomaly is caused by a viral infection causing the leaf to grow irregularly. Such infections have been proposed as explanations for the great morphological, and possibly phytochemical, diversity of vegetatively propagated varieties of the hallucinogen *Brugmansia aurea* (Solanaceae) employed by shamans in the Sibundoy valley (Schultes 1990: 420).

[11] I wish to thank Terry Turner for suggesting this approach to me.

[12] See my previous chapter.

[13] This name is apparently Tupian (cf. Hogue 1993: 383), possibly reflecting *lengua geral* influence.

[14] This insect is known by biologists to form close associations with ants (see Chapter Four).

[15] What biologists consider the winged reproductives of the leafcutter colonies are classified by the Runa as the asexual children (**huahua**) of what biologists consider the sterile guards. These latter, accordingly, are considered to be mothers (**mama**). This understanding conforms to an important local classificatory paradigm by which edible insects and other small animals are thought of as children (see Chapter Seven).

[16] This plant is known in Spanish as *paja toquilla*. In coastal Ecuador it is an important source of thatch and is also used to make the "Panama hat." **Lisan** seems to be an Archidona name. The old name for it in Ávila is **nupu**.

[17] Biologists, however, have a better understanding of the social structure of these colonies and the ways in which they function. The Runa do not recognize that the edible ants are reproductives. Nor do they know that these ants do not eat leaves but instead feed them to the fungi that they cultivate in their nests (which they do eat).

[18] Such small birds are the only kinds of animals taken today with blowguns because they do not require curare, which is no longer available in the region.

[19] Possibly the ashy-headed tyrannulet.

[20] Also known as the wing-barred piprites.

[21] According to Emmons (1990: 35) it is known to make a "soft whistling sound."

[22] This anteater has forefeet with, "one huge and one smaller claw" (Emmons 1990: 34).

[23] It is interesting that a plant with the same name was said to have the same use, and for the same reasons, in coastal Ecuador almost two hundred years ago. Stevenson, who was on the coast around 1810 discusses how a bite from a coral snake was cured using the leaves of "*huaco*" (1825: 242-245). The plant Stevenson describes, may be the same

as that used in Ávila:

> the leaves are about two and a half inches long and half an inch broad; the upper surface is of a dark green, with purple veins running along it, of a glossy appearance and solid texture; the under side is of an obscure purple hue; the leaves grow singly, two being placed opposite to each other on the stem which is slender, hard, and ribbed, and of a bluish color (1825: 243-244).

Its use in the coast is attributed to a similar observation of how a raptor uses this plant:

> Fortunately, a bird at Guayaquil called quiriquinqui, at Esmeraldas and on the coast of Choco, *huaco*, and at Quito, *beteado de oro*, is a great enemy to the snakes, and other venomous reptiles and insects, on which it feeds. It is a species of vulture, about the size of a hen, and is easily domesticated; its color is a bright brown, variegated with stains of pale yellow. It flies about the woods, or runs along savannas in quest of its food, and it attacks the snakes, opposing its wing to them as a shield; when the animal is somewhat exhausted by striking at the bird, it seizes the reptile near the head, and biting it rises on its wings, and afterwards alights, and observes if it be dead; if not, it again bites it, and sometimes soaring aloft with it lets it fall, and immediately drops down after it; when dead the bird devours it. The natives affirm, that to this bird they owe the discovery of the herb which they call huaco; they observed that the bird, after fighting with a snake, would sometimes search for the herb and eat it; hence they supposed it to be an antidote for the poison, which experience has proved to be correct (1825: 244-245).

The bird Stevenson refers to seems to be the northern crested-caracara, which is found in the highlands and on the coast and is considered an opportunistic feeder that can often be found along with vultures (Ridgely and Greenfield 2001: 101). It is not clear whether this particular tradition of learning a remedy from a raptor is a shared one with a very distant history or whether the Ávila Runa adopted this tradition on their trips to the coast to work in banana plantations.

[24] The idea that sweet or salty substances are remedies against snake bite seems to have been prevalent through out the Upper Amazon and has been noted by various Jesuit missionaries during the colonial era.

[25] I once observed what probably were white-lined sac-winged bats sleeping between the buttresses of this species of *Ficus* (cf. Emmons 1990: 46).

[26] Hogue (1993: 265) identifies beetles of the genera *Uroxys* and *Trichillum* (both, like *D. quiquelobatus*, in the family Scarabaeidae) as inhabiting the hair of sloths. It is not clear whether *D. quiquelobatus* also exhibits this behavioral feature or whether the specimen I collected was confused with members of these other genera.

[27] **Amarun** refers to both boas and anacondas in Ávila.

[28] The genus *Triplaris* is characterized by hollow stems that are often inhabited by stinging ants (Gentry 1993: 694). This, however, does not seem to account for the fact that it is known as the "ant tree" in Ávila.

[29] Metaphoric ecology and perspectivism is also combined in more abstract cosmological contexts. This will be explored in some detail in Chapters Five and Six.

[30] That the Runa use a Spanish word to denote the Self is crucial to understanding how the Runa see themselves as part of a larger world and how souls are vehicles for mediation with Christian powers as well as locally-born ones. This will be discussed in more detail in Chapter Seven.

[31] **Ardilla machacui,** mentioned in Chapters Two and Four, also refers to *B. atrox* but this is not seen to be the same snake as **yacu machacui** in Ávila. **Ardilla machacui** may be a juvenile *B. atrox*, they are generally smaller than **yacu machacui**.

[32] In the case of cane liquor, before distillation.

[33] The sound symbolic adverb **ta'** is probably related to the Bobonaza Quichua "**tak**" which Nuckolls defines in part as: "The moment of contact between two surfaces, one of which, typically, is manipulated by a force higher in agency than the other. The positioning of an object in a definite point in space." (Nuckolls 1996: 178). The way in which a jaguar's canine contacts and penetrates the skull of a dog clearly conforms to Nuckoll's definition.

[34] In Ávila, dreaming is referred to primarily with the verb **nuspana**. This seems to be derived from **nuspa**, crazy or dumb. The more common Ecuadorian Quichua verb for dreaming is **muscuna**. This is known in Ávila but rarely used. It may be that the displacement of a neutral term for dreaming by a denigrating one is the product of missionary interaction (cf. Mannheim 1992). However, there seems to be no embarrassment or reticence associated with

dream interpretation in Ávila.

[35] This latter image is quite common in Ávila dreams. It is associated with cleansing and healing and is considered a good omen. One of the most laborious tasks when butchering game is to scrub the intestines until they are clean of excrement so that they become edible. Such a process on game animals is applied metaphorically to the human body.

[36] The way in which food was distributed is different than in most social gatherings. Two rows of plantain leaves, one on either side of the house, are placed on the floor. One is for women and one for men. On each, Camilo placed big chunks of palm heart along with plantains, manioc, and some game meat. People ate communally around the big leaves—the men eating from one row and the women from another. Some, however, like Camilo's godfather and myself received individual plates.

[37] The obvious metaphoric comparison between the domestic and forest realms would appear to be between the domestic dog and its forest cousins the short-eared dog (**sacha alcu**, literally forest dog, *Atelocynus microtis*) and the bush dog (**jacutu**, *Speothis venaticus*). All of these belong to the dog family (Canidae). Although the "forest dogs" are sometimes thought of as the domestic dogs of game masters, they are extremely rare in the forest. The much more important link, in a cosmological sense, is between the jaguar and the dog.

[38] **Tsicta** or **tsijta** in other lowland Quichua dialects.

[39] It would be interesting to know if the Rock Cree of northern Manitoba who address animals in the third person for hunting luck (Brightman 1993: 109-110) are doing so for the same reasons as the Runa. They too are interested in the points of view of different kinds of beings and seem to differentiate between the treatment of animals as objects and as subjects.

[40] These beings are also sometimes referred to as **sacha huarmi** (forest wife) although this term is more common in other Runa communities.

[41] It is only because the Achuar consider the autonomous household the *polis* that socialized nature can be considered "domestic." Because the Runa *polis* includes aspects of the nation-State, nature is more aptly "political." This

point stems from an observation made by Eduardo Viveiros de Castro (personal communication) to the effect that Philippe Descola's classic study of socialized nature—originally titled "*La nature domestique*" (1986)—could well have been titled "*La nature politique*."

42 The Runa of the Peruvian Upper Napo (who descend in large part from those Ávila Runa that were enslaved during the Rubber Boom and brought to that region) have a very similar understanding of game masters (Mercier 1979: 139).

43 This term is also sometimes pronounced **curaca** in Ávila.

44 The term **curaga** (as **curaca** or **curacka**) seems to have been adopted later in Amazonia to refer to indigenous leaders. For example, missionaries of the Mainas region in the mid- use it 18th century (Magnin 1988 [1740]: 477). In the mid-19th century, the "**varayu**" indigenous leaders appointed by government authorities to mediate between Runa communities and the State were also referred to by this term (Osculati 1990: 113).

45 Also known as Jumandy or Jumandi.

46 The authority of 16th century *caciques* of the Quijos region, such as that of Senacato, emanated from their privileged seat atop wooden thrones (Oberem 1980: 225).

47In Oyacachi legends, the same kind of conflation takes place between Jesuits and other Europeans that were in conflict with them (see Kohn in press).

48 "*Sin más pensamientos, q. de chubas, y Gamitanas, Massatos y Guanganas; formándose la idea del Cielo a esse modo, q. allá no faltarán hachas, chaquiras, monos, chaburassas, pitos y tamboriles* […]

49 "*creen, q. entonces tendrán yucas en abundancia, carne y bevida, quanta quisieran, y sobre todo cantidad de mugeres, q. aquí los PP., por mezquinos, no se las permiten.*"

50 The world of the game masters has spatial and temporal qualities that differentiate it from the world of everyday life. It is both a distant place and outside of time (people never age there). These qualities are brilliantly captured

by a Spanish loan that, in its original meaning, also refers to both time and place.

51 In San José de Payamino a similar story is told. A variety of the narcotic *Brugmansia* (Solanaceae) referred to as **sara huandu** or **yacu huandu** is ingested in order to "become an anaconda" (**amarun tucungapaj valin**). If the entire family drinks **yacu huandu**, they will all go to live in the underwater world. Their house will disappear underwater and the coals from the fire will turn into the small fry fish known as **sardina**.

52 There is, however, some talk of reconciliation. The San José Runa speculate that she will forgive her husband and come home in order to take him back with her to the game master realm.

53 People in Ávila do not think of confessions as secret and many people spoke freely with me of the content of their discussions with priests.

54 As another example, the night monkey (**macuru**) occasionally is heard to cry, "**i$^{h}$ i$^{h}$**" near a house. This too is an omen that a relative will die. It is imitating the wails of mourners, "saying, 'soon you will cry like this.'"

55 A reference to the fused lecythidaceous "lid" which is of a wider diameter in this species than that of *G. macarensis*.

56 It was rumored that her condition was caused by the fact that she was given **supai alpa**, the earth found inside archeological ceramic vessels, as a child so that she would not be so sickly. This substance is said to cause a kind of insanity (**umata perdichin**).

57 For bringing such bad omens, the owner refused to feed him for a time.

58 The meaning of the term **huaraca** is all but forgotten in Ávila. Ventura, one of the people who recounted this myth, only knew the term from the myth until he remembered that as a child, playing, he would use a net bag to hurl stones and that this was called a **huaraca**. The Tupian Omagua of the 16$^{th}$ century were described as using slings as weapons. They are also from "down river." (Oberem 1967-1968: 153). The Omagua, then, may be an additional source from which the image of the mythical king is drawn.

59 Several people in Ávila older than Ventura also know of this region and confirm that there are stone structures

there. This region was where the San José Runa used to live. According to Hilario, the San José Runa first lived in Quirihua Llacta on the Muti Yacu. This was about a three-day's walk from Ávila. They then moved to Paya Llacta on the Paya Yacu and then successively to Pungara Llacta, Atalpa Llacta, Bigay Llacta, at the confluence of the Bigay and Payamino Rivers, Taracuhua Cucha, and finally their present location Payamino at the confluence of the Payamino and Tuta Pishcu Rivers. The original settlement, Quirihua, seems to be the same community as the chiefdom known as Mote and that persisted as a village by the name of San José de Mote at least until the late 19th century. San José de Payamino seems to be composed primarily of people from this area and those referred to by Sinclair and Wasson (1923) as the Payamino Indians (from the Payamino River) as well as inhabitants from Ávila.

60 I should note that Quito is not seen exclusively as a paradise. It is said that an epidemic illness, known as **murhui,** that killed many Runa, originated in Quito and that it is still there, locked up in a suitcase. The Runa say that this illness killed half the population at sometime before the Rubber Boom. Indeed, an anonymous document written by a rubber boss in 1913 refers to a smallpox epidemic that swept through the Runa communities of the Upper Napo in 1896 as "**muruy**." It killed "65 percent of the population" (in Porras 1979: 28).

61 A summary of ecclesiastical control over Ávila follows. In 1576 Dominicans established themselves as *doctrineros* in Ávila (García 1985: 80). By the mid-17th century Ávila was under secular clerical control. Because there were so few whites in the Quijos region by this time, the distinction between *doctrineros* for Indians and *curas* for whites and mestizos was no longer applied (Oberem 1980: 100). By the 1720s there were no whites left in Ávila (Oberem 1980: 105). In the 1730s Ávila was referred to as a "*Curato de Ávila*" (parish of Ávila). The villages of Cotapino, La Concepción, Loreto, S.Salvador [de Payamino], and Mote were considered its "annexes" (*anejo*) (Maroni 1988 [1738]: 116-117).

It is during this period, it seems, that the large bells, that are such an important symbol of local identity and the subject of many myths, made their appearance in the indigenous communities. Most of these bells are undated but one, housed today in San José de Payamino, bears the inscription, "*SOY DE SJUAN DE MOT EEHA EL ANO DE 1737*." "*Mot*" seems to refer to Mote and, in fact, the San José Runa say that this was from those ancestors of their group that are referred to as "**muta**." The origin of these bells in Ávila and San José is mythic. They were pulled out of a lake. Yet some people in Ávila, as well as local priests and colonists, associate these bells with the Jesuits.

By the 1760s the parish of Ávila included two more villages, as well as Baeza. Mote was referred to as San José de Mote (Ortiz de Avilés 1955 [1766]: 271). At this time there was certainly a priest residing in Ávila (1955 [1766]: 273). Ávila is still referred to as "*curato de Ávila de los Quijos con sus anejos*" in the 1770s (García 1985: 214). In the 1810's Ávila was under the bishopric of Chachapoyas in what is now northern Peru (Pardo y Barrieda 1905: 125-127). This bishopric appears to have taken over jurisdiction of the Jesuit missions after the expulsion of the Jesuits in 1767. In the mid-1840s Osculati notes that resident priests had been absent for the past three years from the entire *provincia de Quixos* (Osculati 1990: 104). By 1858 the parish of Ávila included the *anejos* Suno, Payamino, Concepción, Loreto, and San José (Villavicencio 1984 [1858]: 378). The Jesuits were readmitted to Ecuador in 1861 (Jouanen 1977: 12). Their initial intent was to work with "infidels" such as the Shuar but they soon refocused –much to the consternation of the missionaries in the field (see Porras 1955: 154)– on semi-Christianized Indians who received very little attention from the Jesuits in their first period of missionization precisely because of their "non-savage" status (Jouanen 1977: 59). It is only at this time that Ávila came under the direct influence of the Jesuits. Loreto displaced Ávila as the religious seat; under the Jesuits, the former parish of Ávila became the *provincia de Loreto* (1977: 32) and Loreto became envisioned as the new mission center like Archidona (1977: 84). In the 1870s Father Guzmán found the inhabitants of San José to have maintained their own religious practice; the Indians gathered to pray on their own. Ávila, by contrast, was found to have, "abandoned its religious practices" (1977: 84). A Jesuit priest residing in Loreto would sporadically visit Ávila, about twice a year, in order to, "provide them with sufficient Christian teaching and administer to them the sacraments of baptism and marriage, and also to celebrate the [Catholic] festivals that they had prepared" (1977: 85-86). At this time, people from Ávila would be invited to the Catholic festivals in Loreto such as Corpus (1977: 86).

The second expulsion of the Jesuits occurred in 1896 (Jouanen 1977: 225). Following this, Ávila and other Upper Napo Runa communities received occasional visits by priests from the archdiocese of Quito (Spiller 1974: 18) until the Josephine order established its mission in the region in 1922. The Josephines were only able to make sporadic visits to the Ávila region until they established a permanent mission with a resident priest in Loreto in 1958.

[62] Yet Ávila seems to have adopted a kind of generic mission Indian culture very early on. Many of the beliefs and traits and Quichua as well as *lingua geral* vocabulary and ethnobiological nomenclature that the Jesuits describe for many of the Indians of their Mainas missions are still part of Runa culture in Ávila today (e.g., Maroni 1988 [1738]: 145, 146, 156-157).

[63] A legend in Ávila recounts how abusive resident priests, sometimes referred to as Jesuits, forced people to fish at night for them and how these Runa were killed by a white jaguar known as **algudun puma**. Another legend tells how the Runa escaped into the forest to avoid the abusive Jesuits and were forced to subsist on **chunda** palm flowers.

[64] In Tena, the hold of the *patrones* ended in the 1950s with the completion of the road connecting this region to the highlands. At this time itinerant Sierran merchants settled and established a merchant middle-class (Muratorio 1987: 217). Although the hold of the estate owners seems to have always been more tenuous in distant Ávila, the era of the *patrones* there ended somewhat later. Roads did not penetrate this region until the 1980s.

[65] These included **sani**, *Picramnia sellowii* subsp. *spruceana* (Simaroubaceae) that produced a dark blue color.

[66] Oberem (1980: 117) documents that in Loreto rubber traders used this same excuse to convince the Runa to go with them down river.

[67] Not the Marcos Jipa mentioned earlier.

[68] He refers to this process as "*desengañar*."

[69] In Ávila, there is another myth that explains the abundance of fish in the lower Napo as opposed to the Ávila region. A fish-bearing tree **challua yura** is chopped down and falls where the Napo river now is. Whereas before, fish could easily be harvested from this tree, because the tree was chopped down these populations have abandoned the Ávila region to inhabit the more placid waters of the lower Napo.

[70] In large part because of a similar tropical climate, the coastal and Amazonian regions of Ecuador are often related. For example, Runa from highland Imbabura often refer to the tropical forests to the west of the Andes as the Oriente.

[71] *Rhinostomus barbirostris* (Curculionidae), a similar looking weevil, that, in the adult stage is referred to as **quirnai burashi mama**, **shundu**, or **illan curu mama**, also produces edible grubs, referred to as **chunda curu**, that, like those of *Rynochophorus palmarum*, are found in the soft pith of fallen palm trees.

[72] At least one woman still paints herself regularly when planting manioc. This, her husband explained to me, is so that she will look "like a mother" ("**mamacuinta**") to the manioc. Thinking that she is their mother, the manioc plants will "have lots of tubers" ("**gustu aparin**"). If she did not paint her face, the manioc would think she was a man. The plants would become frightened and would not become laden with tubers. The design she paints consists of a stripe on either cheek and one across the lips. This custom seems to be disappearing in Ávila.

[73] This particular path (designated specifically as a river path "**yacu ñambi**") was chosen because it followed streams that eventually flowed into the Huataracu River. The **aya** was sent on this route because people do not live in water. If the **aya** were sent through the forest, it was thought, it might pass over a house and cause harm.

[74] The other important element here, marital status, is related to the idea that men are most powerful when abstinent. This is why shamans undergoing initiation, as well as those acquiring hunting charms, are supposed to abstain from sexual relations with women (see Chapter Five). And this too is why priests are also seen as so powerful.

[75] This is Guzmán's translation of the Quichua. It may more mundanely simply mean something like, "that damned priest escaped."

[76] The consumption of salt was a major marker that distinguished mission Indians from those that did not yet have extensive contact with Europeans. Writing of the Jesuit missions in the Upper Amazon Chantre y Herrera observes:

> Es verdad que á los principios ninguna de las naciones convertidas conocía la sal, ni había experimentado en sus montes este necesario condimento: de donde nacía que los recién traídos de los montes, aun cuando estaba ya establecido el uso de él, hacían asco de ella… Sin embargo, estaban ya los indios tan hechos en los pueblos antiguos al uso de la sal y entraban tan bien en ella en los más nuevos, que se miraba como uno de lso géneros más necesarios en la misión (Chantre y Herrera 1901: 622).

Indeed, salt was so important to the missions that the Jesuits organized an extensive network of trade for it which reached up to the quarries on the upper Huallaga River. Even after the expulsion of the Jesuits this trade persisted. In Ávila, middle aged people heard first hand accounts of these trips when they were little. Ventura remembers that newly married couples would go down river for the several-month-long trip for salt and by the time they came back they would already have a child.

In Ávila today, by contrast, salt is readily available. Iodized, it comes in neatly sealed plastic bags that are purchased for a nominal price in Loreto. Nevertheless, salt occupies a place in the pantheon of tastes that goes beyond its mere nutritional value. In Ávila it is a marker of the "good life"–of opulence and reciprocity. It is classified as "**mishqui**"(tasty) which is the same term that is used to refer to things that are sweet or fatty and flavorful. Hard boiled hen's eggs, for example, are offered to privileged guests –say an outside visitor like myself after a long absence—alongside a spoon on which a pile of salt has been carefully heaped high. More daily fare, something that is made for the family or local visitors, is beaten eggs with salt that are boiled and served in a very salty broth. As Jiménez de la Espada observed regarding this dish in San José de Mote: "Esto lo comían con delicia á causa de su sabor marcadamente salado, pues la sal para estos indios es una golosina" (1928: 467).

[77] In other contexts they are referred to as **ñaupa tiempu**, the first times and **callari tiempu**, the beginning times.

[78] The original is:

> **ishkaylla kakaska, wawkipura, Yaya Apustulkuna, chaykunallata ñukas uya karkani. Mana miranchu Yaya Apustulka, chayllapi kan, mana wawayu, mana warmiyu kawsakuna kaska; ña Diusshina kawaskuna kaska. Chaykunaka sikakuna kaska hawama, chaykunata alichiska washa. Kúnaka hawapachapi chari kawsanakun Diuswa parihu. Tukuyta yachachiska washa ña sika kaska. Wisiu urma kaska; chayrayku sika kaska, wisiuta mana gustarka**.

[79] *Cedrela* sp., Meliaceae

[80] In a version of the **juri juri** myth from Ávila documented in 1920, the sole surviving **juri juri** woman is also identified as, "like a young white *Señora*" ("**malta yurac señorashina**") (Dávila 1920: 461).

[81] In a similar fashion, a Shuar narrative of a narcotic vision from the mid-19$^{th}$ century makes reference to "white demons" ("*demonios blancos*") (Avendaño 1985: 164-165).

[82] **Tuta pishcu** literally means night bird. One translation might be "nocturnal bird" but a more faithful gloss, I think, would be "the night's bird," in the sense that the bat is a perspectival and demonic nocturnal equivalent of the diurnal bird.

[83] These include: **chiquiri tuta pishcu**, a kind of bat that eats leaf-cutter ants and the fig-like **parutu** fruits (*Ficus* spp., Moraceae) and lives in hollow standing palm trunks (**chunda pullu**), **pucusca micu tuta pishcu**, a harmless kind of bat that often enters into houses to eat ripe bananas and plantains, **caca tuta pishcu**, found sleeping in cliffs, and **inguilis**, a kind of bat that sleeps inside the conical buds of **lamus panga** (Arecaceae?) and other plants as well as in house thatch. In most contexts, none of these are thought of as demonic.

[84]The term used for this kind of dart was **atalpa tullu**. This literally means chicken bone. **Tullu**, bone, is also used in general to describe shamanic darts.

[85] The Ávila name for the tapir is **huagra** or **sacha huagra**. **Huagra** is also a term used to refer to cattle. In Peru, this animal is often referred to as "*sacha vaca*" (jungle cow) (Emmons 1990: 157). Yet in Ávila game master cosmology, the tapir corresponds to the horse and not the cow.

[86] Although Whitten's descriptions of tobacco use primarily focus on the ingestion of tobacco water, in Ávila such transfer is additionally associated with smoking.

[87] This is not true bamboo but it is functionally and taxonomically closely related.

[88] In Ávila the term **jiji** is used to refer to the order Orthoptera –that is, to the katydids, crickets, and grasshoppers and their allies.

[89] Being **pumayu** in Ávila is in this sense similar to having acquired and Arutam spirit for the Achuar. The Achuar say that people who have become empowered in this way are noticed because of the way they carry themselves in public (Taylor 1996).

[90] Vilaça (1999:243), referring to the Chapakuran speaking Wari' of Brazil writes of, what may be called "clothes switching" between native and white dress as a kind of a shamanistic act.

[91] Many dietary taboos associated with fishing and rivers involve eating cold food. This may be an attempt to resemble the cold waters of the fluvial domain.

[92] It is thought that procreation is the result of the cumulative accumulation (**tandarina**) of semen (**yumai**) from sexual intercourse throughout pregnancy. A woman with multiple partners during her pregnancy (human or spirit) will bear children that are the product of the semen of all of these. Similarly, if a pregnant woman fails to receive regular doses of semen, the child may not fully develop and will not survive.

[93] This is also true for the Eastern Tukanoan Makuna of the Colombian Amazon (Århem 1996: 188).

[94] I discuss in Chapter Three some of the confusion this similarity may have provoked in dogs who seem to have barked at a mountain lion thinking that it was a deer.

[95] In addition to those already mentioned, these include the tooth of the pink river dolphin (**buhyu**), the **machin gunahuaru** frog (*Hyla geographica*) –either pulverized or living—as well as the tooth and pulverized brain ash of the **juri juri**. One person in Huiruno apparently owns this latter charm. It is not clear what it looks like given that it comes from a demonic being that does not seem to have an equivalent in the world of organisms.

[96] The notable exception is the armored catfish (**carachama**) which is said to be the cockroach (**caracha**) in the thatch of the houses of the underwater domain. Armored catfish are flat and have a hard exoskeleton like a cockroach. They can be seen in large numbers eating algae attached to the cliffs of the deep river pools. When one tries to catch them, they immediately scurry into the crags, like cockroaches.

[97] The well-known stimulant coca (*Erythroxylon* sp., Erythroxylaceae) is not currently a native cultivar in the Upper Amazon although it possibly was in the past. Some people in Ávila know it as "*droga*." *E. macrophyllum*, which does not contain cocaine, has a variety of medicinal uses in Ávila.

[98] In Ávila this consisted primarily of woven cotton cloth (Oberem 1980: 92). During the 16$^{th}$ century there was no fixed tribute rate (1980: 82). This allowed the *encomenderos*, who found themselves in a resource poor region, to step up tribute requirements to compensate (1980: 83). Such abuses were the primary cause of the 1578 rebellion (see Chapter Seven). By the 1730s, with the decline of the *encomienda*, natives of the region paid tribute directly to the Crown. In the mid-18$^{th}$ century, according to the governor of Quijos, Macas and Canelos, the priest in Ávila was charging excessive tribute with detrimental effects on the native population (Ortiz de Avilés 1955 [1766]: 273).

At the beginning of the 1800s Ávila residents, along with the other Runa communities in the immediate region, were required to pay the equivalent of four *pesos* yearly in **pita** fiber. Installments were made twice each year: on St. John's day (June 24) and during Christmas. These fall on the summer and winter solstice and thus, for accounting purposes, they conveniently divide the year in two equal parts. That the Runa from Archidona, Tena, and Puerto Napo had to pay twice as much indicates that Ávila and its environs was considered to be a much poorer region (1980: 107). Writing of the Archidona region from the time of the first Jesuit expulsion in 1767 until well into the second half of the 19th century, Muratorio notes that, "durante este período, los Napo Runas estuvieron sujetos a una adminstración civil venal, codiciosa del tributo indígena y a unos pocos sacerdotes ignorantes y corruptos que ocasionalmente visitaban el área (Muratorio 1987: 91). During the republican era, the only interest that the new State had in the region was the, "extracción del excedente en forma de tributo (1987: 91)." Tribute in Ávila during this time consisted of pita fiber and tobacco (Osculati 1990: 107). During the turbulent first decades of the new republic, as the Royal bureaucracy was dismembered, government official stepped up tribute. One strategy that the Runa developed to avoid this abuse was to escape tribute payment by retreating into distant regions (1980: 105, 111).

[99] The equivalence between beads on a string and the intestines of game is common in Ávila as well as Achuar dream imagery:

> A woman's dream of threading glass beads is interpreted as a sign she will empty the bowels of a large animal killed by her husband. The interpretation contrasts an operation where small, hard and hollowed objects are added on a full, flexible and linear support, to an operation wherein small, soft and full objects are expelled out of a flexible, linear and hollow support; the inversion affects the direction of the movements of the hand, the relation between container and contained, and the natural or artificial origin of the objects handled (Descola 1989: 444).

# Bibliography

Århem, Kaj

1996 The Cosmic Food Web: Human-Nature Relatedness in the Northwest Amazon. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 185-204. London: Routledge.

Atran, Scott

1993 Whither 'Ethnoscience'? *In* Cognitive Aspects of Religious Symbolism. P. Boyer, ed. Pp. 48-70. Cambridge: Cambridge University Press.

Avendaño, Joaquín de

1985 [1861] Imagen del Ecuador: Economía y Sociedad Vistas por un Viajero del Siglo XIX. Quito, Ecuador: Corporación Editora Nacional.

Balée, William

1989 The Culture of Amazonian Forests. Advances in Economic Botany 7:1-21.

—

1994 Footprints of the Forest: Ka'apor Ethnobotany —the Historical Ecology of Plant Utilization by an Amazonian People. New York: Columbia University Press.

Barnadas, Josep M.

1984 The Catholic Church in Colonial Spanish America. *In* The Cambridge History of Latin America: Colonial Latin America. L. Bethell, ed. Pp. 511-540, Vol. 1. Cambridge: Cambridge University Press.

Baron-Cohen

1995 Mindblindness: An Essay on Autism and Theory of Mind. Cambridge, Massachusetts: The MIT Press.

Basso, Ellen

1992 The Implications of a Progressive Theory of Dreaming. *In* Dreaming: Anthropological and Psychological Interpretations. B. Tedlock, ed. Pp. 86-104. Santa Fe, New Mexico: School of American Research Press.

Basso, Keith H.

1990 Western Apache Language and Culture: Essays in Linguistic Anthropology. Tucson: The University of Arizona Press.

Bauman, Richard, and Charles L. Briggs

1990 Poetics and Performance as Critical Perspectives on Language and Social Life. Annual Review of Anthropology 19:59-88.

Beckerman, Stephen

1994 Hunting and Fishing in Amazonia: Hold the Answers, What are the Questions? *In* Amazonian Indians: From Prehistory to Present. A. Roosevelt, ed. Pp. 177-200. Tucson: The University of Arizona Press.

Berlin, Brent

Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies. Princeton, NJ: Princeton University Press.

Bhaskar, Roy

1998a General Introduction. *In* Critical Realism: Essential Readings. M. Archer, R. Bhaskar, A. Collier, T. Lawson, and A. Norrie, eds. Pp. ix-xxiv. London: Routledge.

—

1998b Philosophy and Scientific Realism. *In* Critical Realism: Essential Readings. M. Archer, R. Bhaskar, A. Collier, T. Lawson, and A. Norrie, eds. Pp. 16-47. London: Routledge.

Bhaskar, Roy, and Tony Lawson

1998 Introduction: Basic Texts and Developments. *In* Critical Realism: Essential Readings. M. Archer, R. Bhaskar, A. Collier, T. Lawson, and A. Norrie, eds. Pp. 3-15. London: Routledge.

Bloch, Maurice

1991 Language, Anthropology and Cognitive Science. Man (N.S) 26:183-198.

Bourdieu, Pierre

1977 Outline of a Theory of Practice. Cambridge: Cambridge University Press.

Brightman, Robert

1993 Grateful Prey: Rock Cree Human-Animal Relationships. Berkeley, CA: University of California Press.

Brown, Michael F.

1984 The Role of Words in Aguaruna Hunting Magic. American Ethnologist 11(3):545-558.

—

1986 Tsewa's Gift: Magic and Meaning in an Amazonian Society. Washington: Smithsonian Institution Press.

Bruner, Edward M.

1986 Experience and Its Expressions. *In* The Anthropology of Experience. V.W. Turner and E.M. Bruner, eds. Pp. 3-32. Urbana: University of Illinois Press.

Campbell, Alan Tormaid

1989 To Square With Genesis: Causal Statements and Shamanic Ideas in Wayãpí. Iowa City: University of Iowa Press.

Cartmill, Matt

2000 The Problem of Animal Consciousness: Do Horses Gallop in Their Sleep? The Key Reporter 66(1):6-9.

Casey, Edward S.

1996 How to Get from Space to Place in a Fairly Short Stretch of Time: Phenomenological Prolegomena. *In* Senses of Place. Pp. 13-52. Santa Fe, New Mexico: School of American Research Press.

Chantre y Herrera, José

1901 Historia de las Misiones de la Compañía de Jesús en el Marañon Español: 1637-1767. Madrid: Imprenta de A. Avrial.

Colby, Benjamin N.

1996 Cognitive Anthropology. *In* Encyclopedia of Cultural Anthropology. M.E. David Levinson, ed. Pp. 209-215, Vol. 1. New York: Henry Holt and Company.

Colini, G. A.

1883 Collezione Etnologica Degli Indigeni Dell' Alto Amazzoni Acquistata dal Museo Preistorico-Etnografico di Roma. Bollettino della Società Geografica Italiana Anno XVII - Volume XX, Serie II - Volume VIII:287-310, 353-383.

Conklin, Beth A.

2001 Consuming Grief: Compassionate Cannibalism in an Amazonian Society. Austin, Texas: University of Texas Press.

Damasio, Antonio

1999 The Feeling of What Happens: Body and Emotion in the Making of Consciousness. San Diego: Harcourt.

Dávila, Rafael

1920 Folk-Lore del Alto Napo. Boletín de la Sociedad Ecuatoriana de Estudios Históricos Americanos 4:459-467.

de Ortiguera, Toribio

1989 [1581-1585] Jornada del Río Marañon, con todo lo Acaecido en ella y otras cosas Notables Dignas de ser Sabidas, Acaecidas en las Indias Occidentales... *In* La Gobernación de los Quijos (1559-1621). C. Landázuri, ed. Pp. 357-380. Iquitos, Peru: IIAP-CETA.

Dedenbach-Salazar Sáenz, Sabine, ed.

1993 Una Gramática Colonial del Quichua del Ecuador: Transcripción e Interpretación de un Manuscrito del Archivo Histórico Nacional de Colombia. St. Andrews, Scotland: Institute of Amerindian Studies, University of St. Andrews.

Descola, Philippe

1986 La Nature Domestique : Symbolisme et Praxis dans L'ecologie des Achuar. Paris: Editions de la Maison des sciences de l'homme.

—

1988 La Selva Culta: Simbolismo y Praxis en la Ecología de los Achuar. Quito: Ediciones Abya-Yala/IFEA.

—

1989 Head-shrinkers Versus Shrinks: Jivaroan Dream Analysis. Man (N.S.) 24:439-450.

—

1994a In the Society of Nature: A Native Ecology in Amazonia. Cambridge: Cambridge University Press.

—

1994b Homeostasis as a Cultural System: The Jivaro Case. *In* Amazonian Indians: From Prehistory to the Present. A. Roosevelt, ed. Pp. 203-224. Tucson: University of Arizona Press.

—

1996a The Spears of Twilight: Life and Death in the Amazon Jungle. New York: The New Press.

—

1996b Constructing Natures: Ecology and Social Practice. *In* Nature and Society: Anthropological Perspectives. P.D.a.G. Pálsson, ed. Pp. 84-102. New York: Routledge.

Descola, Philippe, and Gísli Pálsson, eds.

Descola, Phillipe and Gísli Pálsson (eds.)

1996 Nature and Society: Anthropological Perspectives. London: Routledge.

Desjarlais, Robert

1996 Struggling Along. *In* Things as They Are: New Directions in Phenomenological Anthropology. M. Jackson, ed. Pp. 70-93. Bloomington: Indiana University Press.

Dickinson, Emily

1997 Selected Poems of Emily Dickinson. New York: Doubleday.

Dolby Tyler, Charles

1894 The River Napo. The Geographical Journal 3:476-484.

Douglas, Mary

1984 Purity and Danger: An Analysis of the Concepts of Pollution and Taboo. London: ARK Paperbacks.

Ellen, Roy

1999 Modes of Subsistence and Ethnobiological Knowledge: Between Extraction and Cultivation in Southeast Asia. *In* Folkbiology. D.L. Medina and S. Atran, eds. Pp. 91-117. Cambridge, MA: The MIT Press.

Emmons, Louise H.

1990 Neotropical Rainforest Mammals: A Field Guide. Chicago: University of Chicago Press.

English, Peter H., and III Theodore A. Parker

1992 Birds of Eastern Ecuador. Ithaca, New York: Library of Natural Sounds, Cornell Laboratory of Ornithology.

Erikson, Philippe

2001 Myth and Material Culture: Matis Blowguns, Palm Trees, and Ancestor Spirits. *In* Beyond the Visible and the Material: The Amerindianization of Society in the Work of Peter Rivière. L. Rival and N. Whitehead, eds. Pp. 81-100. Oxford: Oxford University Press.

Feld, Steven

1996 A Poetics of Place: Ecological and Aesthetic Co-evolution in a Papua New Guinea Rainforest Community. *In* Redefining Nature: Ecology, Culture and Domestication. R. Ellen and K. Fukui, eds. Pp. 61-87. Oxford: Berg.

Ferrer, Rafael

1605 Personal letters reproduced in "Carta annua de la vice prouincia del nueuo reyno Y quito en los Reynos de Peru." *In* Novi Regni et Quitensis. Tom. I; Literae annuae 1605-1652. Archivum Romanum Societatis Iesu. Microfilm MS. Jesuitica Collection, The Knights of Columbus Vatican Film Library at Saint Louis University. Pp. 4r-12v. St. Louis, MO.

—

1995 [1605] Portions of personal letters reproduced in "Carta annua de la vice prouincia del nueuo reyno Y quito en los Reynos de Peru." Novi Regni et Quitensis. Tom. I; Literae annuae 1605-1652. Archivum Romanum Societatis Iesu. Ff. 5v-12v. *In* Primeras Doctrinas en la Real Audiencia de Quito: 1570-1640. H.B. G., ed. Pp. 389-406. Quito: Ediciones Abya-Yala.

Figueroa, Francisco de

1986 [1661] Informes de Jesuitas en el Amazonas. Iquitos, Perú: IIAP-CETA.

Friedrich, Paul

1979 Poetic Language and the Imagination: A Reformulation of the Sapir Hypothesis. *In* Language, Context, and the Imagination: Essays by Paul Friedrich. A.S. Dil, ed. Pp. 441-512. Stanford, California: Stanford University Press.

—

1986 The Language Parallax: Linguistic Relativism and Poetic Indeterminacy. Austin: University of Texas Press.

García, Lorenzo

1985 Historia de las Misiones en al Amazonía Ecuatoriana. Quito: Ediciones Abya-Yala.

Geertz, Clifford

1995 After the Fact : Two Countries, Four Cecades, One Anthropologist. Cambridge, Mass.: Harvard University Press.

Gentry, Alwyn H.

1993 A Field Guide to the Families and Genera of Woody Plants of Northwest South America (Colombia, Ecuador, Peru) with Supplementary Notes on Herbaceous Taxa. Washington: Conservaton International.

Gianotti, Emilio

1997 Viajes por el Napo: Cartas de un Misionero (1924-1930). M. Victoria de Vela, transl. Quito: Ediciones Abya-Yala.

Gonçález Holguín, Diego

1952 [1608] Vocabulario de la Lengua General de Todo el Perú Llamada Lengua Qquichua o del Inca. Lima: Imprenta Santa María.

Gow, Peter

1993 Gringos and Wild Indians: Images of History in Western Amazonian Cultures. L'Homme 126-128(33 (2-4)):327-347.

—

1995 Land, People, and Paper in Western Amazonia. *In* The Anthropology of Landscape: Perspectives on Place and Space. E. Hirsch and M. O' Hanlon, eds. Pp. 43-62. Oxford: Oxford University Press.

—

2001 An Amazonian Myth and Its History. Oxford: Oxford University Press.

Hames, Raymond B., and William T. Vickers, eds.

1983 Adaptive Responses of Native Amazonians. New York: Academic Press.

Hanks, William F.

1996 Language and Communicative Practices. Boulder, Colorado: Westview Press.

Harrison, Regina

1989 Signs, Songs, and Memory in the Andes: Translating Quechuam Language and Culture. Austin: University of Texas Press.

Herzfeld, Michael

1997 Cultural Intimacy: Social Poetics in the Nation-State. New York: Routledge.

Hill, Jonathan D.

1988 Introduction: Myth and History. *In* Rethinking History and Myth: Indigenous South American Perspectives on the Past. J.D. Hill, ed. Pp. 1-18. Urbana: University of Illinois Press.

Hilty, Steven L., and William L. Brown

1986 A Guide to the Birds of Colombia. Princeton: Princeton University Press.

Hirsch, Eric

1995 Landscape: Between Place and Space. *In* The Anthropology of Landscape: Perspectives on Place and Space. E. Hirsch and M. O' Hanlon, eds. Oxford: Oxford University Press.

Hirschfeld, Lawrence A.

2000 The Inside Story. American Anthropologist 102(3):620-629.

Hogue, Charles L.

1993 Latin American Insects and Entomology. Berkeley, CA: University of California Press.

Hornborg, Alf

1996 Ecology as Semiotics: Outlines of a Contextualist Paradigm for Human Ecology. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 45-62. London: Routledge.

—

1998 Ecological Embededdness and Personhood: Have We Always Been Capitalists? Anthropology Today 14(2):3-5.

—

2001 Vital Signs: An Ecosemiotic Perspective on the Human Ecology of Amazonia. Sign System Studies 21(1):121-152.

—

N.D. Review of T. Ingold's The Perception of the Environment: Essays in Livelihood, Dwelling and Skill.

Howell, Signe

1996 Nature in Culture or Culture in Nature? Chewong Ideas of 'Humans' and other Species. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 127-144. London: Routledge.

Hudelson, John Edwin

1987 La Cultura Quichua de Transición: Su Expansión y Desarrollo en el Alto Amazonas. Quito: Museo Antropológico del Banco Central del Ecuador (Guayaquil), Ediciones Abya-Yala.

Hugh-Jones, Stephen

1989 Wãríbi and the White Men: History and Myth in Northwest Amazonia. *In* History and Ethnicity. M.M. Elizabeth Tonkin, and Malcolm Chapman, ed. Pp. 53-70. London: Routledge.

Hymes, Dell

1975 Breakthrough into Performance. *In* Folklore: Performance and Communication. T.A. Sebeok, ed. Pp. 11-74. The Hague: Mouton.

Ingold, Tim

1996 The Optimal Forager and Economic Man. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 25-44. London: Routledge.

—

2000 The Perception of the Environment: Essays in Livelihood, Dwelling and Skill. London: Routledge.

Irvine, Dominique

1987 Resource Management by the Runa Indians of the Ecuadorian Amazon. Ph.D., Stanford.

—

1989 Succesion Management and Resource Distribution in an Amazonina Rain Forest. Advances in Economic Botany 7:223-237.

Jackson, Michael

1996 Introduction: Phenomenology, Radical Empiricism, and Anthropological Critique. *In* Things as They Are: New Directions in Phenomenological Anthropology. M. Jackson, ed. Pp. 1-50. Bloomington: Indiana University Press.

Jakobson, Roman

1960 Closing Statement: Linguistics and Poetics. *In* Style in Language. T.A. Sebeok, ed. Pp. 350-377. New York: The Technology Press of Massachusetts Institute of Technology and John Wiley & Sons, Inc.

Janzen, Daniel H.

1988 Complexity is in the Eye of the Beholder. *In* Tropical Rain Forests: Diversity and Conservation. F. Almeda and C.M. Pringle, eds. Pp. 29-49. San Francisco: California Academy of Sciences.

Jiménez de la Espada, Marcos

1928 Diario de la Expedición al Pacífico. Boletín de al Real Sociedad Geográfica 68(1-4):72-103, 142-193,.

Jouanen, José

1977 Los Jesuítas y el Oriente Ecuatoriano (Monografía Histórica) 1868-1898. Guayaquil, Ecuador: Editorial Arquidiocesana.

Karsten, Rafael

1935 The Head-Hunters of Western Amazonas: The Life and Culture of the Jibaro Indians of Eastern Ecuador and Peru. Volume 7 (1). Helsingfors, Finland: Societas Scientiarum Fennica.

Kohn, Eduardo

in press Infidels, Virgins, and the Black-Robed Priest: A Backwoods History of Ecuador's Montaña Region. Ethnohistory.

—

1992 La Cultura Médica de los Runas de la Región Amazónica Ecuatoriana. Quito: Ediciones Abya-Yala.

Latour, Bruno

1993 We Have Never Been Modern. New York: Harvester Wheatsheaf.

—

1999 Pandora's Hope: Essays on the Reality of Science Studies. Cambridge, Massachusetts: Harvard University Press.

Lévi-Strauss, Claude

1966 The Savage Mind. Chicago: University of Chicago Press.

Macdonald, Theodore, Jr.

1979 Processes of Change in Amazonian Ecuador: Quijos Quichua Become Cattlemen., University of Illinois-Urbana.

Magnin, Juan

1988 [1740] Breve Descripción de la Provincia de Quito, en la América meridional, y de sus Misiones... *In* Noticias Auténticas del Famoso Río Marañon. J.P. Chaumeil, ed. Pp. 463-492. Iquitos, Peru: IIAP-CETA.

Malinowski, Bronislaw

1956 The Problem of Meaning in Primitive Languages. *In* The Meaning of Meaning: A Study of the Influence of Language Upon Thought and of the Sciende of Symbolism. C.K. Ogden and I.A. Richards, eds. Pp. 291-336. London: Routledge and Kegan Paul Ltd.

Mannheim, Bruce

1992 [1987] A Semiotic of Andean Dreams. *In* Dreaming: Anthropological and Psychological Interpretations. B. Tedlock, ed. Pp. 132-153. Santa Fe: School of American Research Press.

Mannheim, Bruce, and Dennis Tedlock

1995 Introduction. *In* The Dialogic Emergence of Culture. D. Tedlock and B. Mannheim, eds. Pp. 1-32. Urbana, Illinois: University of Illinois Press.

Maroni, Pablo

1988 [1738] Pablo Maroni: Noticias Auténticas del Famoso Río Marañon y Misión Apostólica de la Compañía de Jesús de la Provincia de Quito en los Dilatados Bosques de Dicho Río, Escribiales por los Años de 1738 un misionero de la misma compañía. Seguidas de las Relaciones de los P.P. A. de Zárate y J. Magnin (1735-1740). Iquitos, Perú: IIAP-CETA.

Martin, Bartolomé

1989 [1563] Provanza del Capitan Bartolome Martin. *In* La Gobernación de los Quijos. C. Landázuri, ed. Pp. 105-138. Iquitos, Peru: IIAP-CETA.

Medin, Douglas L., and Scott Atran

1999 Introduction. *In* Folkbiology. D.L. Medin and S. Atran, eds. Pp. 1-15. Cambridge, MA: The MIT Press.

Mercier, Juan Marcos

1979 Nosotros los Napu-Runas: Napu Runapa Rimay, Mitos e Historia. Iquitos, Perú: Publicaciones Ceta.

—

1985 Tradiciones Lingüísticas del Alto Napo. Amazonía Peruana 6(12):37-58.

Merleau-Ponty, M.
Phenomenology of Perception. C. Smith, transl. London: Routledge and Kegan Paul.

Métraux, Alfred
1949 Warfare, Cannibalism, and Human Trophies. *In* Handbook of South American Indians. J.H. Steward, ed. Pp. 383-410, Vol. 143(5). Washington: Bureau of American Ethnology.

Moore, John V.
1993 Sounds of La Selva, Ecuador. Mountain View, California: Davkore.

—
1994 Ecuador: More Bird Vocalizations from the Lowland Rainforest Vol. 1. Hayward, California: Master Track Production.

—
1996 Ecuador: More Bird Vocalizations from the Lowland Rainforest. Vol. 2. Freemont, California: Disk Makers.

—
1997 Ecuador: More Bird Vocalizations from the Lowland Rainforest. Vol. 3. Freemont, California: Disk Makers.

Moore, John V., and Mitch Lysinger
1997 The Birds of Cabañas de San Isidro. Freemont, California: Disk Makers.

Moran, Emilio F.
1993 Through Amazonian Eyes: The Human Ecology of Amazonian Populations. Iowa City: University of Iowa Press.

Muratorio, Blanca

1987 Rucuyaya Alonso y la Historia Social y Económica del Alto Napo 1850-1950. Quito: Ediciones Abya-Yala.

Nadasdy, Paul

1999 The Politics of TEK: Power and the Integration of Knowledge. Arctic Anthropology 36(1-2):1-18.

Novaes, Sylvia Caiuby

1997 The Play of Mirrors: The Representation of Self Mirrored in the Other. Austin, Texas: University of Texas Press.

Nuckolls, Janis B.

1996 Sounds Like Life: Sound-symbolic Grammar, Performance, and Cognition in Pastaza Quechua. New York: Oxford University Press.

Oberem, Udo

1967-1968 Un Grupo de Indígenas Desaparecido del Oriente Ecuatoriano. Revista de Antropología. —São Paulo 15-16.

—

1980 Los Quijos: Historia de la Transculturación de un Grupo Indígena en el Oriente Ecuatoriano. Otavalo: Instituto Otavaleño de Antropología.

Obeyesekere, Gananath

1992 The Apotheosis of Captain Cook : European Mythmaking in the Pacific. Princeton, NJ: Princeton University Press.

Ordóñez de Cevallos, Pedro

1989 [1614] Historia y Viaje del Mundo. *In* La Gobernación de los Quijos (1559-1621). Iquitos: IIAP-CETA.

Orr, Carolyn

1978 Dialectos Quichuas del Ecuador Con Respecto a Lectores Principiantes. Volume 2. Quito: Instituto Lingüístico de Verano.

Orr, Carolyn D. and John E. Hudelson

1971 Cuillurguna: Cuentos de lso Quichuas del Oriente Ecuatoriano. Quito: Houser Ltda.

Orr, Carolyn, and Betsy Wrisley

1981 Vocabulario Quichua del Oriente. Quito: Instituto Lingüístico de Verano.

Ortiz de Avilés, Vicente

1955 [1766] Informe del Gobernador de Quijos, Macas y Canelos.-1766. Boletín de la Academia Nacional de Historia 35:270-273.

Orton, James

1876 The Andes and the Amazon; Or, Across the Continent of South America. New York: Harper and Brothers, Publishers.

Osculati, Gaetano

1990 Esplorazione delle Regioni Equatoriali Lungo il Napo ed il Fiume delle Amazzoni: Frammento di un Viaggio Fatto Nell due Americhe negli anni 1846-47-48. Turin, Italy: Il Segnalibro.

Pálsson, Gísli

1996 Human-environmental relations: Orientalism, paternalism and communalism. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 63-81. London: Routledge.

Pardo y Barrieda, José, ed.

1905 Arbitraje de Límites entre el Perú y el Ecuador: Documentos Anexos al Alegato de

Perú Presentados á S. M. el Real Árbitro. Volume 2. Madrid: Imprenta de lso Hijos de M. G. Hernández.

Porras, Pedro I.

1955 Recuerdos y Anécdotas del Obispo Josefino Mons. Jorge Rossi Segundo Vicario Apostólico del Napo. Quito: Editorial Santo Domingo.

—

1979 The Discovery in Rome of an Anonymous Document on the Quijo Indians of the Upper Napo, Eastern Ecuador. *In* Peasants, Primitives, and Proletariats: The Struggle for Identity in South America. D.L. Browman and R.A. Schwartz, eds. Pp. 13-47. The Hague: Mouton Publishers.

Putnam, Hilary

1994 Sense, Nonsense, and the Senses: An Inquiry into the Powers of the Human Mind. The Journal of Philosophy 91(9):445-517.

Ramírez Dávalos, Gil

1989 (1559) Información hecha a pedimiento del procurador de la ciudad de Baeça... *In* La Gobernación de los Quijos. C. Landázuri, ed. Pp. 33-78. Iquitos, Peru: IIAP-CETA.

Rappaport, Roy A.

1979 Ecology, Meaning, and Religion. Berkeley: North Atlantic Books.

—

1984 Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People. New Haven: Yale University Press.

—

1999 Ritual and Religion in the Making of Humanity. Cambridge: Cambridge University Press.

Redford, Kent H.

1992 The Empty Forest. Bioscience 42:412-422.

Reeve, Mary-Elizabeth

1988 Cauchu Uras: Lowland Quichua Histories of the Amazon Rubber Boom. *In* Rethinking History and Myth: Indigenous South American Perspectives on the Past. J.D. Hill, ed. Pp. 20-34. Urbana: University of Illinois Press.

Ridgely, Robert S., and Paul J Greenfield

2001 The Birds Of Ecuador. 2 vols. Volume 2 Field Guide. Ithaca, NY: Cornell University Press.

Ridington, Robin

1982 Technology, World View, and Adaptive Strategy. Canadian Review of Sociology and Anthropology 19(4):469-481.

Rival, Laura

1993 The Growth of Family Trees: Understanding Huaorani Perceptions of the Forest. Man (N.S.) 28:635-652.

—

1996 Blowpipes and Spears: The Social Significance of Huaorani Technological Choices. *In* Nature and Society: Anthropological Perspectives. P. Descola and G. Pálsson, eds. Pp. 145-164. London: Routledge.

—, ed.

1998 The Social Life of Trees: Anthropological Perspectives on Tree Symbolism. Oxford: Berg.

—

2001 Seed and Clone: The Symbolic and Social Significance of Bitter Manioc

Cultivation. *In* Beyond the Visible and the Material: The Amerindianization of Society in the Work of Peter Rivière. L.M. Rival and N.L. Whitehead, eds. Pp. 57-80. Oxford: Oxford University Press.

Rosaldo, Renato

1986 Ilongot Hunting as Story and Experience. *In* The Anthropology of Experience. V.W. Turner and E.M. Bruner, eds. Pp. 97-138. Urbana: University of Illinois Press.

Rudie, Ingrid

1994 Making Sense of New Experience. *In* Social Experience and Anthropological Knowledge. K. Hastrup and P. Hervik, eds. Pp. 28-44. London: Routledge.

Sahlins, Marshall

1985 Islands of History. Chicago: University of Chicago Press.

—

1995 How "Natives" Think : About Captain Cook, for Example. Chicago: University of Chicago Press.

Saignes, Thierry

1999 The Colonial Condition in the Quechua-Aymara Heartland (1570-1780). *In* The Cambridge History of the Native Peoples of the Americas. Volume III South America. F. Salomon and S.B. Schwartz, eds. Pp. 59-137, Vol. 2. Cambridge: Cambridge University Press.

Salomon, Frank

1983 Shamanism and Politics in Late Colonial Ecuador. American Ethnologist:413-428.

Santos-Granero, Fernando

1998 Writing History in the Landscape: Space, Myth, and Ritual in Contemporary Amazonia. American Ethnologist 25(2):128-148.

Schultes, Richard Evans, and Robert F. Raffauf

1990 The Healing Forest: Medicinal and Toxic Plants of the Northwest Amazonia. Portland, Oregon: Dioscorides Press.

Sharman, Russell

1997 The Anthropology of Aesthetics: A Cross-Cultural Approach. Journal of the Anthropological Society of Oxford 28(2):177-192.

Simson, Alfred

1878 Notes on the Záparos. Journal of the Anthropological Institute of Great Britain and Ireland 7:502-510.

—

1879 Notes on the Piojés of the Putumayo. Journal of the Anthropological Institute of Great Britain and Ireland 8:210-222.

—

1880 Notes on the Jívaros and Canelos Indians. Journal of the Anthropological Institute of Great Britain and Ireland 9:385-394.

—

1883 Notes on the Napo Indians. Journal of the Anthropological Institute of Great Britain and Ireland 12:21-27.

Sinclair, Joseph H., and Theron Wasson

1923 Explorations in Eastern Ecuador. The Geographical Review 13(2):190-213.

Spiller, Maximiliano

1974 Historia de la Misión Josefina del Napo. Volume 1. Quito: Artes Gráficas.

Stevenson, W.B.

1825 A Historical and Descriptive Narrative of Twenty Years' Residence in South America, In Three Volumes; Containing Travels in Arauco, Chile, Peru, and Colombia; With and Account of the Revolution, Its Rise, Progress, and Results. Volume 2. London: Hurst, Robinson, and Co.

Stewart, Kathleen

1996 A Space on the Side of the Road: Cultural Poetics in an "Other" America. Princeton, New Jersey: Princeton University Press.

Stoller, Paul

1989 The Taste of Ethnographic Things. Philadelphia: University of Pennsylvania Press.

Strathern, Marilyn

1980 No Nature: No Culture: The Hagen Case. *In* Nature, Culture, and Gender. C. MacCormack and M. Strathern, eds. Pp. 174-205. Cambridge: University of Cambridge Press.

Taussig, Michael

1987 Shamanism, Colonialism, and the Wild Man: A Study in Terror and Healing. Chicago: University of Chicago Press.

Taylor, Anne Christine

1999 The Western Margins of Amazonia From the Early Sixteenth to the Early Nineteenth Century. *In* The Cambridge History of the Native Peoples of The Americas. F. Salomon and S.B. Schwartz, eds. Pp. 188-256, Vol. III, Part 2. Cambridge: Cambridge University Press.

—

1996 The Soul's Body and its States: An Amazonian Perspective on the Nature of Being Human. Journal of the Royal Anthropological Institute (N.S.) 2:201-215.

—

N.D. Contrasting Regimes of Historicity in the Upper Amazon.

Tedlock, Barbara

1992 Dreaming and dream research. *In* Dreaming: Anthropological and Psychological Interpretations. B. Tedlock, ed. Pp. 1-30. Santa Fe, New Mexico: School of American Research Press.

Tedlock, Dennis

1983 The Spoken Word and the Work of Interpretation. Philadelphia: University of Pennsylvania Press.

—

1993 Breath on the mirror : mythic voices & visions of the living Maya. San Francisco: HarperSanFrancisco.

Turner, Terence

1988 Ethno-Ethnohistory: Myth and History in Native South American Representations of Contact with Western Society. *In* Rethinking History and Myth: Indigenous South American Perspectives on the Past. J.D. Hill, ed. Pp. 235-281. Urbana: University of Illinois Press.

—

1995 Social Body and Embodied Subject: Bodiliness, Subjectivity, and Sociality among the Kayapó. Cultural Anthropology 10(2):143-170.

Ventocilla, Jorge

1995 Plants and Animals in the Life of the Kuna. Austin: University of Texas Press.

Vilaça, Aparecida

1999 Devenir Autre: Chamanisme et Contact Interethnique en Amazonie Brésilienne. Journal de la Société des Américanistes 85:239-260.

Villavicencio, Manuel

1984 [1858] Geografía de la República del Ecuador. Quito: Corporación Editora Nacional.

Viveiros de Castro, Eduardo

1992 From the Enemy's Point of View. Chicago: The University of Chicago Press.

—

1998 Cosmological Deixis and Amerindian Perspectivism. Journal of the Royal Anthropological Institute (N.S.) 4:469-488.

von Uexküll, Jakob

1982 The Theory of Meaning. Semiotica 42(1):25-82.

Wagner, Roy

1991 Poetics and the Recentering of Anthropology. *In* Anthropological Poetics. I. Brady, ed. Pp. 37-46. Savage, Maryland: Rowman and Littlefield Publishers, Inc.

Wavrin, Robert

1927 Investigaciones Etnográficas: Leyendas Tradicionales de los Indios del Oriente Ecuatoriano. Boletín de la Biblioteca Nacional:325-337.

White, R.

1991 The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815. Cambridge: Cambridge University Press.

Whitehead, Neill L.

1993 Ethnic Transformation and Historical Discontinuity in Native Amazonia and Guayana, 1500-1900. L'Homme 126-128(33 (2-4)):285-305.

Whitten, Norman E. Jr.

1976 Sacha Runa: Ethnicity and Adaptation of Ecuadorian Jungle Quichua. Urbana: University of Illinois Press.

—

1978 Ecological Imagery and Cultural Adaptability: The Canelos Quichua of Eastern Ecuador. American Anthropologist 80(4):836-859.

Wray, Natalia, and et. al.

1996 Economía Indígena e Integración al Mercado: El Caso de los Quichua del Alto Napo Ecuador. *In* Amazonía: Economía Indígena y Mercado: Los Desafíos del Desarrollo Autónomo. R.C. Smith and N. Wray, eds. Pp. 60-82. Quito: COICA/Oxfam America.

Yost, James A. and, and Patricia M. Kelley

1983 Shotguns, Blowguns, and Spears: The Analysis of Technological Efficiency. *In* Adaptive Responses of Native Amazonians. R.B.H.a.W.T. Vickers, ed. Pp. 189-224. New York: Academic Press.