

**THE ESE'EJA OF THE PERUVIAN AMAZON:
SUBSISTENCE STRATEGIES, TERRITORY
AND CULTURAL PRESERVATION**

by

Chelsea Rozanski

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Degree in Anthropology with Distinction

Fall 2014

© 2014 Chelsea Rozanski
All Rights Reserved

**THE ESE'EJA OF THE PERUVIAN AMAZON
SUBSISTENCE STRATEGIES, TERRITORY
AND CULTURAL PRESERVATION**

by

Chelsea Rozanski



Approved: _____
Carla Guerrón-Montero, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: _____
Jennifer Naccarelli, Ph.D.
Committee member from the Department of Department Name

Approved: _____
Leslie Reidel, MFA
Committee member from the Board of Senior Thesis Readers

Approved: _____
Michelle Provost-Craig, Ph.D.
Chair of the University Committee on Student and Faculty Honors

ACKNOWLEDGMENTS

I was invited to participate in a cultural mapping initiative of the Ese'ejá of Peru by Dr. Carla Guerrón-Montero, my thesis advisor. Dr. Guerrón-Montero has been my main source of support throughout the entirety of this process. Her wisdom and guidance have motivated, inspired, and enlightened me. I had the opportunity to conduct ethnographic fieldwork alongside of Dr. Guerrón-Montero during the multidisciplinary research expedition for three weeks during summer 2014. Led by Professor Jon Cox of University of Delaware's (UD) Art Department, who I would like to thank for welcoming me into his team of researchers, this initiative was supported by a National Geographic Genographic Legacy Fund and the Amazon Center for Education and Environmental Research (ACEER).

I also want to acknowledge the collaborative effort conducted by my team members, who have each been sources of inspiration. Thank you to the photography team for capturing the images that are incorporated throughout this thesis. Working alongside Ese'ejá community members was the most enriching part of my fieldwork. It is because of their hospitality and genuine kindness that I have been able to even write this thesis. I would not have been able to participate in this research initiative without the financial support from the following sponsors: UD Office of Undergraduate Research and Experiential Learning, UD Anthropology Department, UD Alumni Association, The Greater Philadelphia Latin American Studies Consortium, UD Summer Scholar's Program and the UD Center for Science, Ethics and Public Policy. Thank you for believing in my research and in me.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF FIGURES	vii
ABSTRACT	ix

Chapter

1	THE ANCESTRAL LANDS OF THE ESE'EJA.....	1
	Cultural Mapping Initiative	4
	Main Objectives.....	6
	Methodology.....	8
	Ethical Consciousness	11
	Literature Analysis	12
	Plan of Thesis	15
2	PERU & SUBSISTENCE STRATEGIES	18
	Subsistence Strategies	20
	Hunting and Gathering	23
3	ESE'EJA: THE TRUE PEOPLE	30
	Colonization	36
	Ecotourism.....	38
	Medicinal Knowledge At Risk.....	42
	Transformation of Gender Stratification	49
	Artisan Cooperatives	52
4	DEFORESTATION, POLLUTION & SEDENTARISM.....	57

Deforestation & Foraging.....	60
Hunting.....	60
Gathering	65
Illegal Logging	72
Oil Extraction	76
Global Forces at Play.....	78
Pollution & Fishing	81
Fishing	82
Illegal Mining	86
Interoceanic Highway.....	90
Global Forces at Play.....	92
Sedentarism & Horticulture.....	94
Chakras (Farms)	96
5 CONCLUSION	103
Territory Rights & Cultural Preservation.....	103
Sustainable Future	109
Results of Cultural Mapping Initiative	115
Cultural & Historic Preservation	116
Educational Programming	119
Conservation.....	120
Anthropological Framework	122
Concluding Remarks	124
REFERENCES.....	127

6	APPENDIX	134
	Letters of Support.....	134
	Letter of Support from Board of Ese'eja Nation.....	134
	Letter of Support from ACEER.....	138
	Table of Ese'eja Vowels and Consonants.....	140

LIST OF FIGURES

Figure 1	Gathering Brazil nuts with Ese'ija members from Sonene.....	3
Figure 2	Cultural Resource Framework (CRF) utilized for cultural mapping.....	5
Figure 3	GIS Mapping of Ese'ija ancestral lands and current territories.....	10
Figure 4	Ese'ija men fishing and hunting in the Madre de Dios region.	24
Figure 5	Extensive cultivation being practiced by Ese'ija communities.	28
Figure 6	Illegal logging in the Peruvian Amazon.....	36
Figure 7	Don Jacinto sharing stories of the last <i>eyámikekwa</i> (left), while Dr. Guerrón-Montero and I document GIS coordinates (right).....	46
Figure 8	Voucher specimen of <i>cañacaña blanca</i> , used by the Ese'ija to treat coughs and sore throats.	48
Figure 9	Cataloging Ese'ija material culture objects in Palma Real.	54
Figure 10	Gathering <i>yanchama</i> (left) and pulverizing it (right) in Palma Real.....	56
Figure 11	Ceasan from Palma Real making a bow from a <i>Pifayo</i> tree.....	62
Figure 12	Collecting <i>tamshi</i> vines (left) and threading them through a gage (right) with women in Sonene.	71
Figure 13	Graciabella caring for her sick child alone (right) as her husband died in a logging (left) accident.....	74
Figure 14	Forest clearing and regrowth documented by Alvarez (2003).	77
Figure 15	The potential overlap between deforestation and climate change. Potential loss in forest cover (brown) by 2050 (A) business as usual and (B) increased governance scenarios superimposed on the probability of substantial drought.....	80
Figure 16	<i>Barbasco plant</i> (left) used to poison fish by women in Sonene (right)...	83

Figure 17	Study area, Department of Madre de Dios. Mining areas denoted by ‘A’ for Guacamayo, ‘B’ Colorado-Puquin, and ‘C’ for Huepetuhe. Shown with a white box of immediate study area, rational protected and community areas and their buffer zones and topography.	87
Figure 18	Gold, deforestation, and mercury import increases over time. International biweekly gold prices, forest conversion to mining area and annual mercury imports to Peru are illustrated by Swenson et al. (2011).	88
Figure 19	The IOH and other primary roads in the tri-national MAP (Madre de Dios, Acre, Pando) frontier of the Amazon (Perz 2013:28).....	90
Figure 20	Illegal Mining in the Tambopata River, Madre de Dios, Peru.	93
Figure 21	Alejandro’s chakra in Sonene.....	98
Figure 22	Elena and Don Miguel in Palma Real wearing <i>yanchama</i> dress.	106
Figure 23	<i>Achiote</i> plant (left) being applied as face paint (right) for a ceremonial dance in Palma Real.	107
Figure 24	Ese’ija in Palma Real dancing in traditional <i>yanchama</i> dresses.....	108
Figure 25	Godar et al. (2012) analysis of deforestation in four Brazil municipalities.	111
Figure 26	Ese’ija leaders and Cultural Mapping Team members presenting at the National Geographic Headquarters in October 2014.	117
Figure 27	Ese’ija illustrations of their origins (left) and sea creature diversity (right).	118
Figure 28	Map drawn by Ese’ija elders (top) designed on GIS computer software (bottom).	121

ABSTRACT

Translating to the “True People”, the Ese’ija are one of Peru’s last remaining fishing, hunting and gathering indigenous peoples. The Ese’ija deconstruct the dichotomy between culture and nature by emphasizing ways of life that are assimilated into the realm of the natural world. This long-held symbiotic relationship between the Ese’ija, the rainforest and all of its inhabitants is now being challenged by a variety of factors, especially territory restrictions of their ancestral lands. With limited or denied access to long-held territories, particular cultural practices and indigenous histories are beginning to fade. In an effort to document their histories and pass on their cultural practices and knowledge to the next generations, Ese’ija Nation leaders are working collaboratively to gain territory rights of their ancestral lands. Within the context of a cultural mapping initiative, the hypothesis of my thesis underscores how territory restrictions and external forces are challenging Ese’ija subsistence strategies and cultural preservation. My thesis will encapsulate a holistic perspective of Ese’ija culture and how it is being transformed overtime by territory restrictions, deforestation, pollution and mining, and pressures of sedentarism.

Chapter 1

THE ANCESTRAL LANDS OF THE ESE'EJA

The roars of howler monkeys echo in the distance, floating in the wind over the vast canopy of the Amazonian rainforest. Macaws and parrots call back to the guttural howls, marking their territory amongst the layers of dominance. Below the tallest canopy, where this competition stirs, inhabit jaguars, sloths, peccaries (*Tayassuidae*), caiman (*Caimaninae*), bullet ants and one of Peru's remaining fishing, hunting and gathering indigenous peoples: the Ese'eja.

The Ese'eja are an integral part of the web of the Amazonian rainforest. Their long-held sustainable way of life is being challenged by a variety of factors, including territory restrictions, deforestation, pollution, illegal mining, loss of species diversity, and acculturation pressures. Not only are cultural customs of Ese'eja identity at risk of being compromised in a globalized world, but the ecosystem of the rainforest is threatened as well. This thesis challenges contemporary notions of progress by emphasizing a shift in global consciousness. It underscores the external pressures facing the Ese'eja, and how they are transforming Ese'eja subsistence strategies and cultural preservation.

The ancestral territory of the Ese'eja is embedded within the Amazonian ecosystem. The original ancestors inhabited the southeastern Peruvian Amazon and extended into Bolivia. Expansive territory was vital for the existence of the Ese'eja as they were primarily foragers, nomadically roaming the forest for seeds, fruits, nuts,

fish, and game. In addition to foraging, extensive horticulture was observed and documented on Ese'eja ancestral lands.

Such long-held knowledge encompassing plant use, foraging, storytelling and cultural customs have been passed down from generation to generation. Grandfathers and fathers teach young boys how to spear fish, hunt with a bow for peccary, and extract quinine bark (*Cinchona succirubra*), *quina-quina* in Spanish, for cases of malaria. Grandmothers and mothers teach girls how to weave baskets with *tamshi* (*Carludovica devergens*), make clothing from *yanchama* bark (*Poulsenia armata*), gather seeds, fish utilizing poison, and collect Brazil nuts (*Bertholletia excels*) (Figure 1) and sapote fruit (*Quararibea cordata*). At a young age, boys and girls formulate an ingrained knowledge of all that surrounds them in the rainforest. The wisdom that is passed down preserves the culture and thereby the balance of their relationship with the ecosystem. However, overtime this relationship between the Ese'eja and the natural world, including the process of dissemination of knowledge, has been disrupted.



Figure 1 Gathering Brazil nuts with Ese'eja members from Sonene.

For millennia, the ancestral territory of the Ese'eja was extensive, spanning north of the Sonene River to south of the Malinowski River (*Nao'o* in Ese'eja) and La Torre (*Kuishokuei* in Ese'eja) tributary. Now, the territory of the Ese'eja is comprised of three communities within the Madre de Dios region of Peru- Infierno, Palma Real and Sonene- and five communities in Bolivia, which originally formed when an Ese'eja family fled impending colonization during the 1960s. According to an Ese'eja leader, in the past they were “passive” towards the government and the outside world, but they now want to take a more active role in determining their future. In an effort to collectively address the challenges they are facing, the Peruvian communities joined together in May 2013 to form the Board of the Ese'eja Nation. President of the Ese'eja Nation, Carlos Dejavisio Poje, states there is hope to include the Bolivian community.

As these communities become increasingly sedentary, a reliance on traditional methods of nomadic foraging declines, and a dependence on foreign imports emerges. Not all Ese'eja members reject this transformation; some fully embrace it. Nevertheless, as ancestral practices fade, replaced with a hybridization of westernized influences, the balance of Ese'eja culture and the ecosystem is at stake. Working towards territory rights is not solely for the benefit of the Ese'eja, but for the Amazonian rainforest as well.

Cultural Mapping Initiative

So what can be done to preserve cultural knowledge, environmental sustainability and territory rights in the face of copious pressures? How will the Ese'eja remain connected with the land and pass on oral histories of ancestors for generations to come? Ese'eja Nation leaders recognize the critical period in which they are. They need to find ways to document their histories and pass on their cultural practices and knowledge to the next generations. By doing so, the symbiotic relationship that the Ese'eja maintain with the natural world will continue to thrive, and the ecosystem of their ancestral lands will be protected.

One such way to document their cultural customs is through a cultural mapping initiative. Cultural mapping highlights, or “maps”, the holistic characteristics of a given culture (Figure 2).

Cultural mapping is a valuable tool for identifying a community's strengths and its resources. This process can help as communities move into the planning and implementation phase by identifying resources, efficiencies and links

between arts and cultural groups, as well as their common aspirations and values (Cultural Mapping Toolkit 2010).



Figure 2 Cultural Resource Framework (CRF) utilized for cultural mapping.

In May-June 2014, I spent three weeks conducting a cultural mapping initiative in the Peruvian Amazon alongside a multidisciplinary team. The team consisted of Ese'ejá community members from Infierno, Palma Real and Sonene, a community liaison, and professors and students from three University of Delaware colleges: College of Arts and Sciences, College of Education and Human Development, and College of Agriculture and Natural Resources. Our team of researchers was invited to collaborate with the Ese'ejá by the governing authorities of the Ese'ejá Nation. We utilized qualitative and quantitative research methods from the disciplines of

anthropology, art, education, and botany. Theoretical frameworks drawn from ethnography, ecofeminism, and cultural ecology were implemented. Our cultural mapping team and the Board of the Ese'eja Nation collaborated in finding sustainable ways to integrate long-held Ese'eja practices with current transformations brought about by prolonged interactions with the western world.

Main Objectives

1) *Cultural Preservation*: The Ese'eja told us stories about their culture, history, spiritual connection to the forest and the outside pressures they are currently facing, with the expectation that this information was going to be shared broadly¹. At the beginning of August 2014, National Geographic posted an article about our research with the Ese'eja on their website, reaching an international audience. Our role was not to “rescue” Ese'eja ethnic identity, but to document the ways in which they combine long-held beliefs about subsistence practices with creative ways to adapt to changes in their territory. As the purpose of our cultural mapping team was to assist the Ese'eja in their territory claims, we gathered significant data on “traditional” practices. Accounting for the short duration of research and the focus topic, I cannot assume all “traditional” practices are still loved, longed-for, or even despised. Much still needs to be interpreted and understood with further research.

¹ At University of Delaware's Summer Scholars Symposium, the fellow students on my research team and I presented to academic listeners, informing them of the research thus far. I have also presented my thesis at various student research panels.

2) *Conservation*: With the support of our cultural mapping team, the Ese'ejá will create a sustainable community future plan, or *Plan de Vida*. The *Plan de Vida* is both a snapshot of current land use practices and an inventory of the rich natural resource diversity of their ancestral lands. It is a strategic plan for the future of the Ese'ejá Nation including, but not limited to, dynamic GIS mapping of existing uses and characteristics of their ancestral lands. This is also a living document driven by the Board of the Ese'ejá Nation to set a strategic direction into the future that balances their desire to preserve their culture with the need to face formidable challenges of the encroaching developing world around them. Our contribution was to document the traditional ecological knowledge of the Ese'ejá in conserving and using the forest for food consumption.

3) *Educational Programming*: The goal is to incorporate project results into educational programming for Ese'ejá schools and surrounding communities, and globally through (ACEER)'s UD ¡Amigos! Program.

4) *Support for a Sustainable Future*: One of the Ese'ejá's main objectives at the present time is to further engage in tourism ventures through the construction of an educational eco-lodge on a land concession near the Ese'ejá Palma Real community. It is of the utmost importance to avoid perpetuating the idea of the "noble savage" in touristic encounters, and bring the question of conservation to the forefront. My anthropological training thus far allowed me to apply ethnographic attention to the critical question of what happens when people in host communities near and in protected areas become involved in ecotourism.

The objectives of this thesis encompass and extend beyond the four goals of the cultural mapping initiative. In addition to cultural preservation, conservation, educational programming and support for a sustainable future, this thesis seeks a global shift in consciousness. César Augusto Jojajé, the Secretary of the *Federación Nativa de Madre de Dios* (Native Federation of Madre de Dios, FENAMAD), a Peruvian national indigenous rights organization, declared “We [the Ese’ija] are fighting for one voice; one that will continue to respect nature, as we have done in the past.” By addressing territory restrictions, limitations to subsistence strategies and threats to cultural preservation, this thesis seeks to underpin fundamental global networks as they relate to indigenous peoples’ rights in Latin America and the positive and negative elements of such interrelations.

Methodology

As part of the aforementioned cultural mapping team, I documented Ese’ija cultural practices. We captured their perspective, worldview, conservation ethic, and community challenges. Therefore, this thesis is based heavily upon the fieldwork I conducted as part of the team. It therefore surfaces both the challenges and strengths of working in an interdisciplinary team, as well as conducting research in a short duration of time. Whilst living amongst the Ese’ija communities, I cultivated a deeper understanding of their cultural customs and practices. I saw first-hand how vital it is for the Ese’ija to gain territory rights, for the purposes of cultural preservation and environmental sustainability. I utilized the following ethnographic methods as part of my methodology during the research process:

1) *Participant Observation*: This technique involves first hand intensive interaction with the people with whom the ethnographer conducts research (Bernard 2011). My research entailed living among the Ese'ejá for three weeks, engaging in daily activities as well as accompanying men and women in their hunting and gathering activities.

2) *Unstructured Interviews*: Open-ended interviews allow for a depth of understanding of the reasons that motivate the choices made by individuals in relationship to their cultural practices (Bernard 2011). I conducted unstructured interviews with members from each of the three Ese'ejá communities we visited. Dr. Guerrón-Montero and I conducted interviews in seven households in Infierno. Interviews in Palma Real and Sonene were carried out more in the context of participant observation, and took the form of informal conversations with men, women and children in these two communities.

3) *Visual Data Collection and Photo Elicitation*: These are techniques established in anthropology and other social sciences (Venkatraman and Nelson 2008). It involves showing pictures previously taken by research participants and the researcher in an in-depth interview to ask them to describe their thoughts, feelings and actions (Collier and Collier 1986; Heisley and Levy 1991; Ziller 1990). I collaborated with the education team that use the photo elicitation technique and learned from their findings.

4) *Geographic Information Systems mapping*: This is a method of linking quantitative or qualitative data to geographic markers and locations (Azzam 2013; Chang 2007; Renger, Cimetta, Pettrgrove, & Rogan 2002). This allows for a creation of maps that

combine program information with geographic characteristics that surround them. I utilized GIS mapping by recording coordinates of ancestral sites, cultivated fruit trees, and points of oral history (Figure 3). For instance, a coordinate was plugged in when a cultivated mango tree was observed. A prevalence of mango and bread palm trees, not native to the land, provides ample evidence of inhabitation of Ese'ejá ancestors.

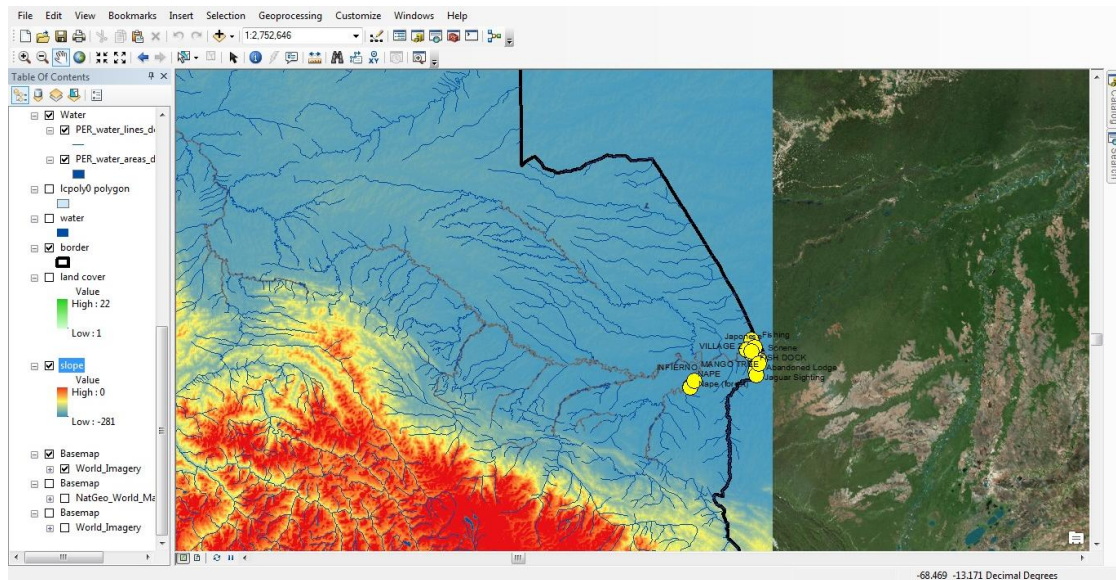


Figure 3 GIS Mapping of Ese'ejá ancestral lands and current territories.

5) *Daily field notes of observations*: Field notes are heavily utilized in the reflection process of fieldwork. These notes consisted of all my daily observations, including community layouts, relationships with domesticated animals and plants, gender roles, what was being eaten, words in Ese'ejá, clothing worn, methods and technology for foraging, and more. Notes were compared and discussed between Dr. Guerrón-Montero, other team members and myself daily.

Ethical Consciousness

During fieldwork, I emphasized an ethical consciousness throughout my methodology. Ideally, ethnographic fieldwork follows the American Anthropological Association's (AAA) Code of Ethics, where risk is minimized for informants and researchers at all times. Through training on human subjects and a thorough review of my planned methodology, I was able to communicate with collaborators and conduct research with a highly ethical perspective².

Indigenous communities are a vulnerable population worldwide due to historical suppressions of political autonomy and governing authority. I received the necessary training in order to work with this population prior to on-site fieldwork. In addition, the research team to which I belonged was invited by Ese'eja leaders to participate in this research project in collaboration with them. Therefore, there was minimal risk in the participation of members of the Ese'eja community in this research. Additionally, working in a collaborative manner allowed for Ese'eja participants to navigate and be integral partners in the research. Leaders of the community chose which endeavors our research team did for the day, whether it be fishing or listening to oral histories of the elders. Throughout the process, I adhered closely to the guidelines of the American AAA Code of Ethics and perceived the practices carried out by the Ese'eja as objectively as I could.

An integral part of mitigating risk is protecting the confidentiality of collaborators. To do so, I used pseudonyms in my field notes. The real names of my informants have been kept on a separate file, along with the correlated pseudonym.

² Going through Human Subjects clearance has allowed me to further reflect upon ethics in my fieldwork.

Data has been and will only be shared with research participants and the University of Delaware community through my Senior Thesis and at the Summer Scholars Symposium.

According to American anthropologist Clifford Geertz (1972) in his ethnography *Deep Play: Notes of the Balinese Cockfight*, our observations as ethnographers are only interpretations of layers of interpretation. As a researcher, my voice cannot and should not stand for the entirety of the Ese'eja culture. Intertwined with an ethical consciousness, research should be an organic culmination of numerous interpretations. This will ultimately lead to a richer body of ethnographic fieldwork and a deeper ethical perspective of the world and its inhabitants.

Literature Analysis

There is substantial literature on territory rights, subsistence strategies and particularly foraging, cultural preservation, ecofeminism, cultural ecology, and indigenous peoples in Latin America. My thesis adds value to this rich body of extensive literature by providing a first-hand account of ethnographic analysis. This fieldwork highlights pressing issues through an interpretation of the voices of the Ese'eja.

This thesis is situated within the body of work previously conducted focusing on the Ese'eja. One of the largest studies published on the Ese'eja is by Miguel Alexiades (1999; 2009). Alexiades conducted his Ph.D. dissertation on the ethnobotany of the Ese'eja, analyzing native plants, their medicinal relevance and changes Ese'eja communities are facing. *Mobility and Migration in Indigenous Amazonia* (2009) is a “treasure trove of insights on a diverse set of topics” (Cepek

2013): the centrality of the “nomadic lifestyle” to all aspects of indigenous culture; urbanization, suburbanization, and multisited residence in the Amazon flood plain; the conservation-related implications of individual movement and settlement shifting; the roles of mobility and migration in plant domestication; changing ethnic frontiers and the transformation of indigenous social and political structures; forces, displacement and the creation of multiethnic communities; the expansion of ethnobotanical knowledge among peoples immersed in frontier economies; the consequences of displacement on material culture and ethnic politics; and the relationship between forager mobility and ethnobotanical knowledge.

Desmarchelier et al. (1996) also analyzed ethnopharmacology, the ritual and medicinal plants of the Ese’ejá. Daniela Peluso (2003) researched gender relations and constructions of social power among Ese’ejá women for her Ph.D. dissertation at Columbia University. One theoretical approach of my thesis stems from ecofeminism, a movement and perception of gender relations. Ecofeminism focuses on the association of women with nature and the environment and the simultaneous relationships among patriarchy, global economic expansion, and environmental degradation (Adams 1993; Kheel 2008; Sturgeon 1997). For a Ph.D. dissertation at Stanford University, Ocampo-Raeder (2006) carried out a systematic assessment of the effects of Ese’ejá indigenous resource management practices on an Amazonian forest. Equator Initiative (2012) was a case study of Infierno to research local sustainable development solutions for people, nature and resilient communities. Amanda Stronza (1999; 2005; 2008) investigated ecotourism at the Posadas Amazonas ecolodge near Infierno. Stronza highlighted the importance of such an initiative being community-based for it to have lasting sustainable impacts. Lastly,

Isabella Lepri (2006) conducted research with the Ese'ejá of Northern Bolivia, focusing on “identity and otherness.”

Relative to literature of other foraging indigenous populations such as the !Kung and Hadza, there is not a substantial amount of information published about the Ese'ejá. Therefore, this thesis will add to the growing body of Ese'ejá literature. Richard Lee's (1968) ethnography on the !Kung is classic reference regarding foraging practices, globalization, and misconceptions of indigenous peoples. Marjorie Shostak (1981) also highlighted the experiences of the !Kung, particularly of a woman named Nisa. Other anthropologists that provide detailed examples of hunter-gatherer lifeways include Ames (1999), Binford (1968), Carneiro (1961), Gould (1987), Kelly (2013), Kwan (2006), Pangau-Adam (2012), Pringle (2014), Robinson (2004), Sahlins (1968), Smith (2000), Speth (1990), and Winterhalder (1981). These authors also highlight the hybridization and flux foragers adapt by centralizing hypotheses of cultural ecology.

Cultural ecology focuses on the relationships between society, technology and the environment. The cultural core is those behaviors most closely related to the extraction of energy from the environment. Anthropologist Julian Steward saw the cultural core as the foundation of any society. Cultural ecology encouraged a significant amount of studies of the subsistence practices of hunter-gatherer societies, including the Ese'ejá of the Peruvian Amazon.

In the face of external pressures, such as deforestation and illegal mining, it has become challenging for the Ese'ejá to preserve their cultural identity. I have also placed my work inside relevant discussions of land degradation, climate change, and the extinction of species. Alvarez and Naughton-Treves (2003) conducted a case study

of Tambopata from 1986-1997, analyzing the correlation between agrarian policy and deforestation in the Peruvian Amazon. Malhi et al. (2008) researched deforestation in the context of climate change, while Wang et al. (2009) narrows in on deforestation and cloud climatology. Godar et al. (2012) also centered on deforestation in the Amazon, emphasizing one cause being the Transamazon Highway in Brazil. Perz et al. (2014) discuss trans-boundary infrastructure in the Southwestern Amazon. Gutierrez-Velez et al. (2013) focused on land cover conversion to oil palm, while Orta-Martínez and Finer (2010) underscored oil frontiers and indigenous resistance in the Peruvian Amazon. Gold mining, deforestation and mercury imports were researched by Swenson et al. (2011) and Brooks (2007). Deforestation, gold mining, oil extraction and exploitative infrastructure are central in the discussion of territory rights and cultural preservation of the Ese'ejá.

Plan of the Thesis

The next four chapters address the main concern of the effects of territory restrictions on cultural preservation for the Ese'ejá of Peru. All data stems directly from my field notes of observations and unstructured interviews, and referenced works. Vignettes are intertwined throughout the thesis, organized in titled boxes, to provide firsthand accounts of my observations. Chapters 2 and 3 set the foundation for which to understand and interpret the impacts of territory restrictions and the significance of cultural preservation discussed in later chapters.

Chapter 2, Peru and Subsistence Strategies, provides an overview of the history of Peru in order to give the reader a sense of place and time. In order to understand challenges that are being faced nowadays by an indigenous population in Peru, one

must have a comprehensive historical analysis. In addition, this chapter illustrates the varying subsistence strategies practiced in Peru and where the Ese'eja would be classified on that fluid spectrum. Fundamental characteristics of foraging societies are provided in order to highlight how essential ancestral lands are to the Ese'eja.

In Chapter 3, Ese'eja: The True People, the cultural identity of the Ese'eja is delved into holistically through an analysis of cultural customs and community dynamics. From colonization to contemporary ecotourism and artisan cooperatives, the shifting nature of gender roles and subsistence strategies are illustrated. The ethos of the Ese'eja is portrayed in order to personalize and humanize their story. The territory restrictions themselves are explained further, as well as the role of the Ese'eja Nation. This chapter addresses why there is a current demand for territory rights and its motivating forces.

The Ese'eja currently face many challenges, which are addressed in Chapter 4, Deforestation, Pollution, and Sedentarism. I concentrate first on how illegal logging affects long-held practices of hunting and gathering, and therefore the cultural customs inherently within those practices. Then the relationship between illegal mining and fishing practices is discussed, tackling the impacts of pollution on species and therefore subsistence strategies. Finally, this chapter addresses how restrictions on territory lead to changes in horticulture as a subsistence strategy, and the impact of those changes on cultural practices and knowledge.

After illustrating in previous chapters the effects of territory restrictions on subsistence strategies and therefore cultural preservation, the concluding chapter will re-emphasize why one should care. What will it mean if rights to ancestral territory are gained? How would that affect subsistence strategies, cultural preservation and

sustainability? This concluding chapter emphasizes how the Ese'eja are balancing a sustainable existence, hybridizing “traditional” methods and contemporary practices. Future plans for the cultural mapping initiative and territory rights will be addressed.

Chapter 2

PERU & SUBSISTENCE STRATEGIES

One cannot understand modern day Peru and its peoples without looking to the nation's history. Issues surrounding territory, resource extraction, and the flux of cultural preservation need to be analyzed within the framework of intersecting cultural and environmental factors overtime. Peru has been portrayed in broad extremes: as the land of the richest treasures, the bloodiest conquest, the most poignant ballads, and the most violent revolutionaries. The myth of El Dorado, a golden empire, represents Peru as a land of magical strangeness and fantasy, filled with gardens of plants, trees and flowers, gold and silver (Starn 1995). However, this has not always been the perception.

Ancient cultures spanned from the Norte Chico civilization, one of the oldest in the world, to the Inca Empire, the largest state in Pre-Columbian America (Starn 1995). The Chavin Cult was the first major Andean civilization. The sky, cosmos and underworld played central roles in Andean life. This is illustrated through motifs on monoliths and pottery analyzed by archaeologists. What is fascinating is that many of the images depicted are of animals and landscapes of the lowland jungle. This three-tiered cosmology is not only held by Andeans, but by Amazonian peoples, especially shamans.

According to Orin Starn (1995), Europeans, who were drawn to Peru to escape the confines of Old World Europe in the sixteenth century, described the country in Romanticism literature as breathless: Andean peaks plunging to Amazonian canyons

of orchids, pythons and jaguars. Peru is the fourth largest country in tropical forest extension on earth and has the second largest region of Amazonia after Brazil (Orta-Martínez, 207).

In 1635, a large-scale process of conversion to Christianity introduced Western education, steel tools, imports which were more valuable than exports, and Old World diseases (Chibnik 1994). Subsistence patterns of many lowland communities changed as large, centrally planned economies with ties to the highlands developed. Hunter-gatherer societies were pressured to become sedentary floodplain farming communities using agricultural methods, and were encroached upon by cattle ranchers, miners and loggers, oil explorers, and infrastructure, as said by Chibnik (1994). Overtime this has led to an increase in deforestation, *wechi* in Ese'ija, and the devastation of native groups of the Peruvian Amazon.

When Peru gained independence from Spain in 1824, laws were passed to protect indigenous groups. However, the country soon underwent phases of political unrest and financial crisis. According to Chibnik (1994), the first depletion of Peruvian Amazon resources correlates to the introduction of steamboats and increased commerce in the 1850s. The Tambopata region of southeastern Peru has long been isolated by high mountains to the west, and flowing rivers and dense jungle to the east. This area was buffered from the global economy until the rubber boom of 1890-1920, where rubber was tapped from rubber trees. Invested companies imported more than six thousand workers from neighboring countries and other parts of Peru (Alvarez 2003). This population culminated into the *ribereño* society, or Amazonian residents of mixed ancestry.

During this time, plantation production rose, prices decreased, and enslavement and epidemics decimated indigenous populations. Workers received low prices for rubber and paid high prices for goods bought by patron's stores (Chibnik 1994). Despite its late arrival in the southeastern Peruvian Amazon, and relatively short duration, the effects of the rubber boom were drastic and long-lasting. Forests along the rivers were severely altered, in order to access more rubber trees, which created an imbalance of the ecosystem.

During the 1900s global rubber prices declined. This forced Tambopata's community members to engage in other economic means of production, including gold mining, selective logging and collection of Brazil nuts (Alvarez 2003:270). Associated with post-rubber boom downriver migration, many hunter-gatherer societies faced a transformation, including the Ese'ejá. According to anthropologist Miguel Alexiades (2009), the rubber boom created demographic chaos and polarized the Ese'ejá spatially and socio-politically. Thusly, the rubber boom marked the beginning of intensified relations between Ese'ejá, the state and the regional market economy. There was an increase in market involvement, sedentary settlement and an agriculturally-based subsistence.

Subsistence Strategies

The varying methods people utilize to obtain food are commonly known as subsistence strategies (Dettwyler 2011). Generally, they are classified cross-culturally under systems of food collectors and food producers. Food producers include herders, pastoralists or those who practice animal husbandry, as well as farmers. Pastoralism is a strategy that relies on the care of domesticated herd animals, such as cattle or goats.

Among pastoral populations there is typically a low population density, flexible social organization with little hierarchy, moderate to limited material possessions due to increased mobility, and an extensive knowledge of the environment along with cultivation. The two types of pastoralism include transhumance, where herd animals are moved regularly with the population, and nomadism, where the community moves according to the needs of the herds (Spradley 1980:69-72). Examples of such societies include the Nuer of Sudan (Peters-Golden 2002:164-179), the Yarahmadzai of Iran, and the camel-herding Gabra of Ethiopia. Pastoral systems continue to decline due to advancing agriculture, alternative economic opportunities, increased enclosure of lands available, and shifts in global warming.

When societies are pressured, or freely make the decision, to become sedentary, other forms of subsistence take form. The second strategy under food producers is farming, the planting and harvesting of vegetable foods. Three subsets of farming are horticulture or extensive cultivation, agriculture or intensive cultivation, and mechanized industrial agriculture or industrialism (Spradley 1980:69-72). With more intensification there is a greater division of labor. Generally, women are more exploited in agricultural societies than foraging societies. This is also a state of flux and cannot apply to all agricultural societies.

Extensive cultivation is the production of plants using non-mechanized technology. Due to the increase in sedentarism, material possessions increase. Basic tools such as digging sticks and plows, and irrigation techniques are implemented alongside a high output of human physical labor. In addition to no draft animals, the soil of such plants is not exploited continuously unlike intensive cultivation (Dettwyler 2011:64- 66). Societies that rely mainly on horticulture, such as the Lua of

Thailand and the Yanomamo of South America (Peters-Golden 2002:246-263; Hicks 1996:28-32), have relatively low population density and have a flexible social organization with an increase in social hierarchy.

According to Spradley (1980), slash-and-burn is a type of agricultural technique that involves the cutting and burning of plants in order to create fields. Nutrients from the burned plants go back into the soil, creating a sustainable model only if performed on a small-scale for low density populations. The Hopi of North America, the Makuna of Colombia and the Kuikuru of the Amazon Basin (Carneiro 1961) practice slash-and-burn, or swidden agriculture. This strategy could be defined as extensive or intensive, depending on the scale at which the plants are burned.

Intensive cultivation, or agriculture, is a form of food production in which fields are in permanent cultivation using draft animals, plows, irrigation and soil control. With more control over food production and a higher population density, there is greater social complexity and vulnerability. Social stratification leads to controlled processes and institutions mandating the means of subsistence (Burton 1984). Agriculture has been criticized for setting in motion contemporary issues of overpopulation, disease, social hierarchies, and environmental changes (Pringle 2014). Agricultural societies, such as the Musha of Egypt, acquire more sophisticated tools and techniques. The state of material sophistication reaches its peak in mechanized industrial agriculture, or simply industrialism.

Industrialism is what our modern society practices. It is the use of machine technology and chemical processes for food production (Dettwyler 2011; Spradley 1980). Societies are highly populated and highly complex. Stratification often leads to

systems of inequality, individualism and a specialization of markets. Now contemplate the opposite of this, which would be a society specializing as food collectors.

Foraging refers to strategies utilized to obtain nonproduced foodstuffs, or other resources, that are not directly cultivated by humans, although they may be conserved or managed (Winterhalder 1981). Foraging strategies were the primary means of subsistence in the world for most of human history (Kwan et al. 2006; Pangua-Adam et al. 2012; Robinson and Bennett 2004; Smith and Wishnie 2000), yet only 0.01 percent of world societies are chiefly foragers. Foraging may involve hunting, trapping, netting, gathering, snaring, fishing, and other techniques. Food collectors can be small-scale foragers and complex foragers. Small-scale foragers are highly mobilized, have low population density, no social hierarchy and travel long distances. An example would be the !Kung of the Kalahari Desert in Southern Africa (Lee 1968; Shostak 1981). Complex foragers, for instance indigenous communities in the Pacific Northwest, are less mobile, tend to have higher population densities and social hierarchy is present. Both small-scale foragers and complex foragers are commonly known as hunter-gatherers.

Hunting and Gathering

Hunter-gatherers have been defined socially, as band societies, people living in small groups with flexible membership and egalitarian sociopolitical relations. Although a division of labor exists between males and females, it is generally cooperative. They have also been defined economically, as people without domesticated plants and animals (Kelly 2013). In any case, hunter-gatherers did and do procure their own food through hunting, gathering and fishing (Figure 4). In

addition, many do grow a portion of their food, trade with agriculturalists, and participate in cash economies. Five characteristics of the generalized foraging model include egalitarianism, low population density, lack of territoriality, a minimum of food storage, and flux in band composition (Spradley 1980).



Figure 4 Ese'ija men fishing and hunting in the Madre de Dios region.

Hunter-gatherers and small-scale societies- those that maintain political autonomy at the level of one or a few local communities- have historically been polarized. Such peoples are either seen as “guardians of the earth” living in harmony with the environment until invaded by an outside destructive force (agriculture,

industrialization, capitalism), or as “primitive pollutants” with an account of environmental destruction. There is now a more balanced perception, which has been attributed to a spiritual respect for, and a practical understanding of, the natural world (Smith 2000:493). Research in anthropology, environmental studies, cultural ecology and other disciplines has also contributed to a better understanding of such societies.

Foraging practices of the Ese'eja are embedded within their cultural identity. The Ese'eja thwart the juxtaposition of the “guardians of the earth” and “primitive pollutants” binary. They neither live in complete partnership with the land, as they do practice extensive cultivation and now sustain a sedentary lifestyle, nor pose a danger to the ecosystem through overexploitation of its natural resources. Rather, the Ese'eja, like most small-scale societies, break down this polarization and try to live as sustainably as possible with the resources that are available in their environment.

In 1965, anthropologist Richard Lee (1968) documented the lives of a semi-nomadic hunter-gatherer !Kung population, also known as the “bushmen” of the Kalahari. In the Dobe area of Botswana, Lee observed that the !Kung did not practice agriculture or pastoralism, but obtained sixty to eighty percent of their diet from foraging vegetable foods (Lee 1968:33). Hunting accounted for approximately twenty percent of the diet and typically had a low success rate. The division of labor entailed that women and children forage, predominantly for mongongo nuts (*Ricinodendron rautanenii*) and wild berries, while men hunt wild animals such as impala (*Aepyceros melampus*) (Spradley 1980). Currently, among the Hadza of Tanzania, men also assist in foraging wild honey and Baobab fruit (from the Baobab tree; *Adansonia Digitata*). There is an abundance and variety of food for the !Kung, although it is often a variable distance away. This is why extensive territory and fluid boundaries are important to

the !Kung and all foraging societies. The !Kung are a cooperative society with a low population density, making it difficult to maintain secrets or illustrate individualistic behavior. According to Lee, the two individual goals of a !Kung person are to live with adequate leisure time, and to enjoy the rewards, both social and nutritional, offered by hunting. The !Kung have been depicted as the “original affluent society” (Sahlins 1968) enjoying an egalitarian life with simplistic social organizations and an abundance of freedom.

Contemporary hunter-gather societies, including the !Kung, are not affluent societies, and to deem them so would be to disregard the severe challenges they face. Most hunter-gatherers now live in “marginalized” environments (Cohen 1989), where game animals have largely disappeared and there is an impending encroachment of large societies. Most of these societies have not chosen to live in such environments but have been forced to by the pressures of competition.

Most societies do not fit into a box of subsistence strategies. Cultures are fluid, practicing a variety of strategies to obtain food. The Ese'ejja are both foragers, relying on fishing, hunting and gathering, as well as horticulturalists, harvesting local and imported foodstuffs (Alexiades 2009). They also participate in market economies by traveling to larger towns and selling their produce. In our Western society, many people practice mechanized industrial agriculture, obtaining food from a local grocery store which has been made and packaged in factories. However, today there are populations of communities that rely on agriculture and horticulture for their subsistence³.

³ The number of Native American foragers has declined due to acculturation pressures and land restrictions.

The Ese'eja, like the !Kung, are a contemporary hunter-gather society that also practices other forms of subsistence, such as extensive cultivation. The copious challenges facing contemporary foraging societies make it difficult to continue practicing such subsistence strategies as hunting, fishing, and gathering exclusively. For one, these strategies rely heavily on expansive land use and nomadism. When territory is restricted, these strategies are constrained, pressuring societies to become sedentary. Once a society becomes sedentary, it is still possible to forage but it is more complicated as one has to travel longer distances at a time to obtain food and bring it back to camp. Therefore other methods of subsistence are explored, such as horticulture and domestication of animals.

New subsistence strategies brought on by external pressures are not perceived as negative influences by all Ese'eja. The Ese'eja continue to practice foraging even though they live a sedentary lifestyle and also rely on horticulture (Figure 5). Fusions continue to be molded between ancestral methods, contemporary influences, and practices in between. However, with a decreased reliance on hunting, gathering and fishing due to territory restrictions, the cultural customs associated with such strategies are beginning to fade.



Figure 5 Extensive cultivation being practiced by Ese'eja communities.

The Ese'eja of Peru are at a critical time of flux where cultural preservation, land rights and sustainability of their ecosystem and subsistence strategies are of the utmost importance. What is at stake is not only the future of the Ese'eja, but the welfare of their ancestral lands in the Peruvian Amazon. This chapter has encapsulated an analysis of Peru's history and the meanings inherent within various subsistence strategies, particularly foraging. In the following chapters, this thesis will address Ese'eja cultural identities, including constructs of spirituality, gender roles, subsistence strategies, and their connection to the land. In doing so, it will be vital to place the Ese'eja spatially, temporally and contextually. Challenges towards territory,

subsistence strategies and cultural preservation are holistically tied to Peru's history and that of hunter-gatherer societies.

Chapter 3

ESE'EJA: THE TRUE PEOPLE

The Ese'eja believe they came down to the earth on a cotton thread from the sky. "The name Ese'eja translates to the *true people*," states Ceasan, a middle-aged Ese'eja man. Elders still know the exact spot in the forest, which is now within the Tambopata National Reserve, where they descended from the thread. In the words of one Ese'eja elder, Don Miguel, "We are the ancient owners of this land because we were the first to come down from the sky. Without the forest, there is no life... and no Ese'eja." The Ese'eja are extremely concerned about land rights, pollution, mining, logging and proposed dams, and are apprehensive that the industrialized world is going to take advantage of their ancestral homelands. They have witnessed deforestation, clashes between indigenous peoples and the government, and pollution from mining and industry. The Ese'eja are determined to avoid a similar fate of other indigenous peoples of Peru and Latin America.

The Ese'eja comprise approximately 1,500 people, and speak their native language (Ese'eja) in the Tacana language family, itself part of the Macro-Panoan group of languages of Western Amazonia (Peluso and Alexiades 2005). Spanish is also widely spoken. The Ese'eja chiefly reside in the communities of Infierno, Palma Real and Sonene along the rivers Beni (*Kuei'ai* in Ese'eja), Madre de Dios (*Na'ai* in Ese'eja), Heath and Tambopata in the Madre de Dios region of Peru (Peluso and Alexiades 2005). There is a population of Ese'eja in the region of Pando, Bolivia and assimilated Ese'eja also live in Puerto Maldonado, Peru. Infierno, the largest, most

Westernized and closest community to Puerto Maldonado, was the first Ese'ija community our cultural mapping team visited.

Entering the Field

I awoke at 5 A.M. and took in the splendor of the Amazonian sunrise. As the river curved, the tree tops lit up one by one until literal rays were bursting through them. A mist turned into clearness where clusters of flocking birds could be seen in the distance. A ripple in the water created a relaxing, babbling sound. Hues of yellow and orange, faded by white, spread over the greens, blues and browns of the forest and river beneath it.

At 8 A.M. on this Monday morning, we began our fieldwork in Infierno. The first challenge was climbing up a steep hill to town from the Tambopata River where we disembarked a *peki peki*, a small boat with a motor. After catching my breath, I realized how in awe I was at being in an Ese'ija community. Along a main dirt road were electric poles and water towers, indicating a presence of electricity and running water for some households. Throughout the day, men and women dug tunnels for sewage, sold ice pops under trees, and manned their small stores.

As I walked down the main path of Infierno, music played from inside the homes to the left and right. Televisions highlighted soccer matches and radios boasted music by Tito, a reggaeton band. The first school we came upon, named *Eskuejani*, was for kindergarteners. Three little energetic girls came outside with their teachers Emilia and Elsa. The next school was a primary school where we introduced ourselves to two classes. In the second classroom an elder, Don Jacinto, was teaching the students the language Ese'ija. He walked around saying a word in Spanish, calling on

students to repeat the same word in Ese'eja. Don Jacinto is part of an initiative consisting of three elders from Infierno, who visit the school to teach Ese'eja several times per week. The elders of the community are determined to pass their knowledge and native tongue on to the next generation before they too pass. Behind the primary school building is a soccer field, where a match of boys versus girls commenced before noon. The third school present in the community is a secondary school. Central to the three schools painted in blue is a general field where town events occur. Next to the field, we congregated with school children, elders and leaders for an afternoon of oral histories. Under a tall tree with arching branches, students sat on their wooden chairs, carried from their classrooms. I sat amongst the antsy students as they intriguingly listened to their respected elders tell stories of their ancestors and discuss the changing of the secondary school's name.

The anniversary of Infierno's schools planned to occur on May 24th, so the town was preparing for the celebration. Flags were hung from light post to light post down the dusty main path, and school children washed their desks outside the freshly painted blue schoolhouses. Suds flowed everywhere and smiling-faced children cupped their hands to blow bubbles into the air.

There are approximately sixty-five families in Infierno, with more or less four people in each household. Members of Infierno work closely with a tourism company, Rainforest Expeditions, which operates the Posada Amazonas eco lodge on Ese'eja land (Stronza 2005; 2008). They want to share their knowledge of tourism with other Ese'eja groups, but also reconnect with traditional values. While conducting research in Infierno, our cultural mapping team camped in Ñape, an Ese'eja research center.

Camping in Ñape

Upon pulling up to the sloping banks of Ñape, multicolored butterflies fluttered about. The center provides lodging for tourists and researchers, has a dingy lodge, and various paths with labeled flora. During our stay, approximately three tour groups came through and learned about medicinal properties of the native plants from Don Marco, an Ese'eja expert herbalist. He worked alongside environmental anthropologist Dr. Miguel Alexiades when he was conducting fieldwork with the Ese'eja (1999). After setting out tents up in a *palapa*, a thatched roof structure with a wonderful cross-breeze, we explored the trails and soaked in the magical essence of the jungle. There was movement above, below, in front, behind, to the left and right, and inside of me. I saw fascinating insects and blooming flowers, fungi and wise trees standing sturdy and tall. Although it was stifling hot, the canopy shade was delicious. I meandered by the river and could tell it was about to rain as howler monkeys in the distance let out thundering roars. The current picked up and the nutrient-rich terracotta water flowed smoothly past the green brush and blue sky, all the way to Palma Real.

Palma Real is the next closest Ese'eja community to Puerto Maldonado and the second community our cultural mapping team visited. This community retains strong Ese'eja traditions and is becoming more familiar with tourism. Palma Real is organized socially and geographically into three family clans- Arriba, Medio, Abajo, encompassing approximately one-hundred families.

Day One in Palma Real

During the boat ride to Palma Real, we passed two illegal mining riggers. The entrance to Palma Real is a precariously steep white-faced bank. After unloading our gear off the boats, we walked through the community towards the artisan cooperative building where we camped. Along the way, we greeted community members and observed how houses are chiefly constructed of wood with thatched or metal roofing. A large soccer field stands across from a brightly painted school. Tucked away in the back corner of the village, we set up our tents on the second floor of the cooperative building. Members of Palma Real sat on the first floor observing us while children climbed the upstairs' beams watching us unpack. Before a formal meeting with the community, we began getting to know one another informally and learned new Ese'eja words. The attempts at pronunciation and intonation always were received with grateful smiles and amiable laughs.

All members of Infierno speak Spanish but a small percentage speaks Ese'eja. In Palma Real, Ese'eja is more widely spoken among the older generations although younger generations have an interest in learning the language. Members of Sonene chiefly speak Ese'eja, although most also speak Spanish. After spending five days in Palma Real, we took a two-hour *peki peki* ride to Sonene, the third Ese'eja community.

Although Sonene has the lowest population density and faces less acculturation pressures than Infierno and Palma Real, territory restrictions have impacted Sonene severely, as their way of life is threatened by increased activity in illegal logging, mining and poaching.

Entering Sonene

Boat rides along Amazonian waterways are enchanting experiences. Wind blows through your hair as warm water splashes against your brow, waving to a passerby here and there and catching rays of the sun. After passing through the Peruvian Border Patrol, guarded by the Peruvian Navy, we turned right into the Heath River. This small and windy river is what separates Sonene from Bolivia. Before there were demarcated national borders with entrance laws, the Ese'ejá nomadically foraged in this area.

Sonene's shore is an incline leading to an even steeper set of rickety, wooden stairs. The layout of the community is a representation of their colonial past. Surrounding a large grassy rectangle made into two soccer fields are stilted wooden houses with thatched roofs. Coconut palm trees neatly line the boarder of the fields, passing an empty blue school building, deserted health center, and a quaint artisan cooperative building. It took longer to become acquainted with Sonene members and gain their trust as so many Westerners have come and gone before us, not helping the community in any substantial way.

Roger Rumrill, an expert on the Amazon's indigenous communities declared "For the indigenous people, the land is sacred, but in Western culture the land is simply a resource" (Johnson 2010). Land is sacred for indigenous populations as they depend on it for their survival. Also embedded within the lands are cosmological myths and cultural identities.

The Ese'ejá are facing an onslaught of environmental threats compromising their hunting, fishing and gathering way of life. Miguel Alexiades (2009) stresses that a history of dynamism and movement should not invalidate territorial claims. The

Ese'ija have limited access to vital areas of their ancestral lands, mining operations are polluting their waters with heavy metals, logging operations are depleting neighboring forests (Figure 6), and biodiversity is diminishing.



Figure 6 Illegal logging in the Peruvian Amazon.

Colonization

While the formation of a political body among the Ese'ija is a recent change, by no means has their society been static for the past fifty years. During the 1960s and 1970s, the Peruvian government worked in collaboration with Dominican missionaries to convert the Ese'ija from being nomadic to living a more sedentary lifestyle. This second wave of colonization was accomplished by taking Ese'ija children from their parents and forcing them to live on missions and adopt Christianity and a more westernized way of life.

Ese'eja society abruptly went from an itinerant hunter-gatherer lifestyle to one of sedentarism. The Dominicans did not necessarily discourage Ese'eja knowledge of the forest, but they did try to change their culture, including who they were, how they married, and what they worshipped. Alcohol was prohibited, children were only allowed to see their families for a week or two during the entire year, and chakras, or garden plots, were initiated. However, it was not just the Dominicans that tried to impose their values on the Ese'eja. A group of Japanese settled on Lake Valencia in the Madre de Dios area and began cultivating rice where the Ese'eja fished. According to FENAMAD Secretary César Augusto Jojajé, the Japanese settlers tried to stop the Ese'eja from fishing in their newly acquired land. This created problems regarding resources and territory.

In Peru, land ownership by indigenous communities is not well respected. The Peruvian government maintains total rights to the resources underground, including minerals, gas and oil and holds the rights to resources such as fish, water and timber. The government has also created new concessions opening up seventy percent of the Amazon basin to oil and gas exploration; however, many of these concessions have yet to be delivered. Despite the fact that the Peruvian government canceled the massive Inambari Dam project on June 14th, 2011 after years of strong community opposition, there remains a constant threat of dams being constructed along the many tributaries to the Amazon River.

As the world becomes increasingly globalized, matters of social and environmental concern become more complex and vital. The remainder of this Chapter will demonstrate the holistic ways the Ese'eja are affected, positively and negatively, by western influence, restricted territory rights and changing subsistence

strategies. It must be recognized and understood that what is currently at risk is not only indigenous knowledge, a sustainable way of life, and territory rights, but all aspects of Ese'ejá culture are being affected, including economic relations, traditional health systems, and gender roles.

Ecotourism

The Ese'ejá were one of the first indigenous groups to use the 1970s Peruvian government Law of Native Communities to formally establish themselves as a community, demarcate their land, and gain territorial rights (Equator Initiative 2012). As a result of receiving the status of an indigenous community by the Peruvian government, the Ese'ejá were able to develop community-based ecotourism in the Infierno community (Jamal and Stronza 2008; Stronza 1999, 2005). As defined by The Ecotourism Society, ecotourism is “responsible travel to natural areas which conserves the environment and improves the welfare of the local people.”⁴

In the 1990s, there was an increase in ecotourism in the Madre de Dios region of Peru's lowland Amazon, occupied by the Ese'ejá for thousands of years. Madre de Dios is the third largest and least populated department in Peru, home to eighteen unique ethnic groups and seven linguistic families (Peluso and Alexiades 2005). This region is globally recognized as one of the most biologically rich and unique areas on Earth. It is proclaimed by Peruvian law to be the “Capital of Biodiversity,” hosting the highest number of mammal, avian, and amphibian species in the continent (Swenson 2011:2).

⁴ <http://untamedpath.com/eco-tours/eco-travel.shtml>

The rise in tourism during the 1990s is due in part to the Tambopata National Reserve, of which a section of the Ese'eja Native Community of Infierno is included. The area was soon declared a reserve within the community-based land management plan, and 3,000 hectares of land were set aside to form a communal reserve prohibiting hunting, logging, forestry and other types of resource extraction. To benefit from the biodiversity of the communal reserve, a "low-impact ecotourism venture" was initiated that would not interrupt the lives of the inhabitants of the Infierno community (Jamal and Stronza 2008).

A participatory ecotourism initiative was established in 1996 with Rainforest Expeditions. Prior to this project, the Ese'eja Infierno community was economically impoverished and marginalized (Equator Initiative 2012:5). There was unsustainable strain on the local ecosystems and natural resources caused by a lack of variable livelihood options. In partnership with Rainforest Expeditions, the Ese'eja community of Infierno now runs an eco-lodge, Posada Amazonas.

This eco-lodge is situated in their ancestral territory, along the Tambopata Ecotourism Corridor, and was constructed with local materials, including wood, palm fronds, wild cane and clay (Jamal and Stronza 2008:321). The objective of the lodge is to safe-guard the biodiversity of the Amazon and its peoples through low-impact, educational tourist activities. In addition, joint-decision making and benefit-sharing has been stressed. Not only do direct employees of the eco-lodge benefit from a new economy and market, but the larger community does too. Community participation has led to enhanced communal management of lakes, wildlife and forests in the territory in Infierno.

The lodge reflects the overlapping between global capitalism and local livelihoods, as said by Jamal and Stronza (2008). A 'Control Committee', elected by the communal assembly, meets with Rainforest Expeditions on a monthly basis to discuss all matters at hand and make necessary decisions for the eco-lodge. Additionally, the committee oversees lodge operations, management and communication.

Thus far, the success of Posada Amazonas has significantly improved local incomes and livelihoods of the Ese'ejá community of Infierno. As Jamal and Stronza (2008) state, with an increase in tourism, community members have begun to take charge of and find new meanings in their own lives, and integrate traditional practices into constructing and sharing their forested home. Although there is newfound dependence on ecotourism among some residents of the Infierno community, there has also been a resurgence of cultural pride, as documented in longitudinal ethnographic research since 1996 (Jamal and Stronza 2008:326). Research has observed a rise in efforts to learn their indigenous language, songs, and stories from elders, an increased interest to share indigenous culture with tourists, and the adoption of native identity by several non-native community members.

Ecotourism fosters a network of global communication and understanding through a more sustainable lens. There is an opportunity for cultural exchange and a broadening of one's view on the world. However, ecotourism does not always lead to positive outcomes, as cultural traditions and communal relations are significantly affected. For instance, an ecolodge an hour away by *peki peki* from Sonene was constructed by foreign investors several years ago. It was a gorgeous and spacious structure with thatched roofing, electricity and running water. Unlike Posada

Amazonas, the European owners did not work cooperatively with Ese'eja members from Sonene and shortly after opening, management abandoned the ecolodge. It was left to decay, tourists no longer brought profits to the area, and the Ese'eja who worked there were left without a means of income. Some turned to engaging in illegal logging in order to support their families. All too often, this occurs around the world. A cycle of external dependence is fostered, becomes unsustainable and then fails all-together.

The introduction of ecotourism has also affected Ese'eja subsistence strategies, gender relations, and various long-held cultural practices. Subsistence relationships of the Ese'eja have undergone transformations as conservation knowledge has arisen with the correlated rise in tourism. For instance, with increased conservation efforts, more restrictions are set in place for hunting species of monkeys and snakes.

Gender relations have also shifted with new economic opportunities and complex systems of emerging gender roles. As agricultural intensification develops, dichotomies of public and private spheres ensue. Divisions of labor form new meanings of the value and purpose of a given sex. As men participate more in ecotourism endeavors, women must bear the brunt of extra work at home. An Ese'eja women spoke about her relationship with her husband, who was administering an Ese'eja lodge:

My husband is not here. He cannot help me with our six children. Yes, he makes money, but he is not here to chop firewood, carry plantains, and keep the fields or hunt or fish. The little ones do fish, and my sisters help me with meat sometimes, but I have nothing to give them. My husband has bought us a gas stove, but look over there! It has been

empty for many months. It is expensive to refill. He is working- but he is not here! (Peluso and Alexiades 2005:12)

Overall there have been alterations in cultural practices, such as hunting, farming and forest extraction activities. These alterations are not explicitly negative, as some members of indigenous communities welcome the changes.

Medicinal Knowledge at Risk

“The forest is no longer merely ready-to-hand (practical) for traditional subsistence use, it has become present-at-hand (theoretical) for conservation science and commodified for sale to ecotourists” (Jamal and Stronza 2008:324). By traditional use, Jamal and Stronza (2008) refer to the extraction of medicinal properties within the Amazonian jungle. As a result of colonization and market penetration in the twentieth century, the Ese’ija began to integrate outside influences into their traditional practices, specifically medicinal. Alexiades (1999) argues that the ways in which Ese’ija think, talk about and interact with medicine mirrors recent historical, ecological and social changes. They have a complex pharmacopoeia of plant, animal and mineral origin. Plants are not only significant in the Ese’ija diet but for medicinal and ritual purposes as well (Alexiades 1999; Desmarchelier 1996). Religion and culture are closely linked and the existence of shamans, known locally as an *eyámikewa*, is essential for an ethnic identity of the Ese’ija.

Cosmologies in South America encompass three worlds: sky world, earth world, and the underworld; each has a correlated power animal. The sky Shaman is represented by a harpy eagle that flies in the sky world. A jaguar symbolizes Earth world, where shamans go to the jungles to search for the souls of evil spirits. In the

underworld lies the caiman, where a shaman must pry open its mouth to get the soul out. An effective shaman knows the ins and outs of the unseen cosmos and can bring back the pathways taken through personal experience. Knowing these worlds and returning absent information or lost souls makes the shaman heroic, ensuring a noteworthy, feared status within the community at large. “I became a shaman not because it was my will, but because it was the will of my shaman spirits. The shaman spirits came to me, to make me a shaman” (DuBois 2009).

Religious scholars Louise Backman and Åke Hultkrantz (1977) indicate four elements as constitutive of shamanism: a concept of conscious spirits associated with all elements, a cosmology of several worlds inhabited by diverse spirits, a tradition of trance-state spirit travel, and a focused role for the shaman as a specialist in spirit travel and negotiation. For shamans to journey spiritually, they must have a concept of a cosmos that contains several levels, temporal dimensions, and a notion of spiritual interlocutors with which to interact. These become vital in the shaman’s professional duties to their therapeutic approaches and many practitioners point to their knowledge of the cosmos as a chief sign of the effectiveness of the relations with spirit helpers.

A belief in evil powers, which stem from the direct action of harmful shamans or interfaces with the devil, can be seen as the cause of disease, as said by Gurni Desmarchelier (1996). Illness can also be caused by accident, distraction and indolence. The main remedy shamans use during healing rituals to cure illnesses and to communicate with spirits is *ayahuasca* or ‘*jono pase*’, a drink containing alkaloids harmine, causing a state of trance for both the patient and shaman. One element of the *ayahuasca* mixture is the plant *Chacruna* (*Psychotria viridis*), *Jonokua kuawaji* in *Ese’ija*, which stimulates dreams and hallucinations. By entering into trance states

through communally recognized rituals, a shaman is able to communicate with spirits, travel the cosmos in search of errant souls, and minister to the particular needs of clients (DuBois 2009).

During an ayahuasca ritual, also used in shamanic initiation, tobacco is used, vomiting is elicited, animal spirits are envisioned, and the causes of and remedies for the disease are discovered. Often, costumes worn by shamans during healing ceremonies are adorned with mirrors which are said to help the shaman “see the world” or to “place the spirits” or reflect the needs of mankind (Eliade 1964:153). The use of ayahuasca proposes that numerous diseases that affect the Ese’ija are of a psychosomatic nature. Folk therapeutic agents, originating from plants and animals, are results of generations of shamans. Men fill the role as shaman, whereas women are mainly herbalists. This gives men great power and authority in communities. Members seek the knowledge of the “elderly wise man” to heal and learn traditions surrounding cosmology. The knowledge of both is passed on to following generations, but this cycle has been interrupted.

As health centers were established in Infierno, Palma Real and Sonene by foreign investors, a reliance on natural remedies and the correlated knowledge of such medicines declined. The health centers in Palma Real and Sonene have since been abandoned, creating a significant problem in regards to the state of medical information available in the communities. Additionally, the last living *eyámikekwa*, Vojaje Shame, passed away on July 6th, 1986.⁵

⁵ While visiting ancestral lands of the Ese’ija with members from Palma Real, our cultural mapping team had the privilege of viewing Shame’s burial site.

Ancestral Sites of the Ese'eja

Palma Real has two cemeteries; one in their village and this one located a boat ride away, which I documented via GIS coordinates. Don Jacinto, an elder of Palma Real, shared how his mother used to bury many community members here. The emotional importance of this sacred land was shown through his tone and expression as he told tales of those who had passed (Figure 7). A *renaco tree (Ficus trigonata)* stands tall, with roots so large one could walk under them, at the entrance of the cemetery. It then extends into a vast clearing amongst the jungle floor. Families were buried next to one another, with scribed names and deceased dates on wooden crosses. When the Ese'eja inhabited this land, a river flowed a distance away from the cemetery. Now there is no such river. Homes were built next to the river and fruit trees were cultivated. The homes have since been swallowed by the forest, but the mango and bread palm trees have grown tall. Such trees are vital in providing evidence of ancestral inhabitation.



Figure 7 Don Jacinto sharing stories of the last *eyámikekwa* (left), while Dr. Guerrón-Montero and I document GIS coordinates (right).

The Ese'eja are spiritually connected with the natural world around them and everything that exists. Becoming a shaman is a sacred process in which an individual is chosen by a spirit to fulfill the role. A shaman is not just a healer but a spiritual and wise guide for his people. It is a difficult, yet crucial, role to fill in society. There are healers within the Ese'eja communities, like Don Marco who is an expert herbalist, but no one who can be deemed an *eyámikekwa*.

With limited or denied access to their ancestral lands and historically sacred sites, and in the absence of a shaman, some of the Ese'eja indigenous histories and knowledge of traditional cultural practices are beginning to fade. One role of the cultural mapping initiative was to work with Ese'eja members in cataloging plant

voucher specimens. A collection of plants, vines, bark, seeds and more, were identified and labeled in Ese'eja, Spanish and its scientific nomenclature. This catalog aids in the cultural preservation of Ese'eja indigenous knowledge and serves to capture the existence of Ese'eja ethnopharmacology before it fades.

Ethnopharmacology of the Ese'eja

While gathering Brazil nuts with Ese'eja members from Sonene, I learned of various remedies within the forest for illnesses and pains. For instance, if one were to be bitten by a bullet ant scurrying up and down a Brazil nut tree, one could chew *palmiche* (*Geonoma deversa*) leaves, *sipi'inya* in Ese'eja, into a grind and rub them on the bite. *Palmiche* leaves are also utilized for weaving roofs in the community. In order to treat malaria, quinine bark must be collected, boiled and the concoction sipped by the ill individual. The leaves from the *diablillo* plant, *sha-shai* in Ese'eja, are used to stop bleeding from cuts. The *matico* plant (*Piper hispidum*), *kuioshaja'ay* in Ese'eja, helps reduce fevers, sore throats, and coughs. *Ajosacha* (*Mansoa alliacea*), *beohhaha batiji* in Ese'eja, also treats fevers as well as bodily sicknesses. *Cañacaña blanca* (*Dimerocostus strobilaceus*), *po'o-p'o* in Ese'eja, soothes a cough and sore throat (plant is shown in Figure 8). In the same Family is *Cañacaña colorada* (*Costus acreanus*), also *po'o-p'o* in Ese'eja, which treats a cough as well as diarrhea. Another remedy for diarrhea is herbal tea made with the root of a *Huevo de Gato* plant (*Stemmadenia grandiflora*), *poji-haha* in Ese'eja.



Figure 8 Voucher specimen of cañacaña blanca, used by the Ese'ejá to treat coughs and sore throats.

During an expedition in the jungle with members from Palma Real, I observed various medicinal plants including *jergón sacha* (*Dracontium*), *peoja-ijia-jo-shijaje* in Ese'ejá, which helps treat snake bites. Another remedy for snake bites is the root of the *pona* plant (*Socratea exorrhiza*). *Ejamejo-kiji* is a plant that's tuber is a remedy for female infertility, and *Piñon Colorado* (*Jatropha gossypifolia*), *chihi-shicuiji* in Ese'ejá, treats small skin lesions. *Bashonaske*, *pishoma'i* in Ese'ejá, is a pain reliever for jammed joints, and resin from the *Achiji* tree cleans cuts. The *Kuidojo* tree has water inside of its trunk that's properties help with colds. One cultural mapping team member who was sick drank this water to help her healing process. Seeds from the *achiote* plant (*Bixa orellana*), *apo'e shawe* in Ese'ejá, are not only used for painting artisan handcrafts but for treating mouth sores. Red resin from the *Sangre de Toro* tree can be used to relieve pain and itching, and the *Uña de Gato* vine (*Unacaria*

tomentosa) is part of alternative medicine treating cancer and tumors. Some homeopathic doctors have embraced the vine's medicinal properties, but not conventional doctors. Indigenous medicinal knowledge is closely connected to foraging practices and stands to be lost with increasing degradation of Amazonian biodiversity.

Ese'ēja traditional healing is dependent on the environment in which they live. A modern westerner goes to the pharmacy to purchase Advil upon having a headache; the Ese'ēja go to the Amazonian rainforest. Territory restrictions have hindered the ability to access certain medicinal plants and resources. Depending on the altitude and proximity to water sources, a particular curing specimen may be located in one area of the Tambopata Reserve and not another. Overall, the balance of the rainforest is not only critical for Ese'ēja subsistence strategies, but for copious other aspects of their culture, including healing practices and even gender relations.

Transformation of Gender Stratification

In addition to a displacement of traditional health systems, the role and status of women within Ese'ēja communities is changing. In the 1960s, Ernestine Friedl argued that gender stratification is directly related to the degree to which females contribute to the economy (Kottak 1989). Since, there has been a great deal of literature arguing against this hypothesis.

Nevertheless, in foraging and horticultural societies where women contribute considerably to the economy, there is less gender stratification. As women's contributions to the economy diminish, gender stratification increases. Martin and Voorhies (1975) analyzed five-hundred and fifteen horticultural societies to

investigate how gender roles and stratification varied according to economy and social structure. From their results, women were found to be the main producers in horticultural societies. In half of the societies, women did most of the cultivating. In a third of the societies, men and women made equal contributions to cultivation. Men did most of the work in only seventeen percent of the societies. Women dominated horticulture in sixty-four percent of the matrilineal societies and in fifty percent of the patrilineal societies. Based on the results of Martin and Voorgies' study (1975), when a society's economy is based on agriculture, women typically lose their role as primary cultivators.

Martin and Voorgies (1975) found that women were the main workers in fifty percent of the horticultural societies but in only fifteen percent of the agricultural groups. Male subsistence labor dominated eighty-one percent of the agricultural societies but only seventeen percent of the horticultural ones. Agricultural subsistence activities tend to be male-dominated, as women's work is concentrated in the home. Gender stratification is heightened when the domestic and public spheres are sharply separated. As stated by Kottak (1989), in foraging societies the domestic-public dichotomy is not as emphasized, hierarchy is least marked, aggression and competition are most discouraged, and the rights, activities and spheres of influence of men and women overlap the most. In brief, gender stratification is more pronounced in agricultural societies than in foraging or horticultural ones. As the subsistence strategies of the Ese'eja are changing, so too are gender relations.

There is now less demand for women's garden produce and their status as agriculturalists, gardeners and guardians of biodiversity are considered less important than the ability to pan gold and exchange it for hard currency. Women's complex

understandings and knowledge are valued less. Women's knowledge is oral, belonging to the individual women, who, over their lifetimes, have built up their understanding of the environment, the crops and the spirit world. Historically, they have passed on this wisdom to their daughters and granddaughters as they grew up, but this is not happening as it used to. As women are being drawn into the new economic activities and roles, they are ceasing to cultivate their diversity of crops, and knowledge of how to cultivate these is vanishing. They find themselves in a new dependency on men for access to money, with which to buy products used in place of their garden produce.

Another way women are being affected, specifically by the introduction of tourism and the Posada Amazonas eco-lodge, is an increase in responsibilities when their spouses become involved in the project. This involvement means there would be new restrictions on men's time for productive activities, such as farming and fishing, and attending community meetings. Subsequently, those tasks become the responsibility of women. Additionally, women continue their daily tasks, including cleaning, cooking, washing clothing, caring for children, tending livestock, and selling produce. This added stress on women can hinder their economic potential and influential role in their community.

As territory is increasingly restricted, making it more difficult to forage, the Ese'jeja are relying more heavily on a horticultural subsistence. This shift has remarkable impacts on gender relations in a given society, as previously demonstrated. One way women have resumed leadership positions and relied on their indigenous knowledge of their environment is through artisan cooperatives.

Artisan Cooperatives

“Being a part of making crafts, selling them and relying on the jungle gives me strength in the community.”

- Yamila, a twenty year old Ese'eja woman in Palma Real's artisan cooperative

With a changing economy and environment, pressures for all Ese'eja family members to earn an income have risen. With a decrease in self-sustainability and an increase in individualism, families must look to additional ways of earning a sustainable income, as well as outside support if necessary. This support can be in the form of governmental loans, community aid from an NGO or university, ecotourism, and other income sources. In any case, while generations continue to pass, traditions from those prior are molded intricately into the modern world, creating a new cultural identity with a flux of novel ideas and goals.

As Infierno, Palma Real and Sonene are situated along the Tambopata Ecotourism Corridor, novel ideas of subsistence are emerging. In recent years, artisan cooperatives have been established in Ese'eja communities to provide additional means of economic support. Not only do cooperatives assist communities economically, but they function as sources of empowerment for women. Women cultivate positions of power and authority, develop autonomy and courage, find acceptance in other women and common goals in a cooperative.

Artisan cooperatives interweave local traditions and natural resources with a global market. Artisans embrace cultural traditions as they portray the meanings of life through baskets, jewelry, bags, and more, using natural materials. Recently, recycled materials have also been utilized in artisan handcrafts. If one wants to invest in a new bag or hat in the west, one goes to the mall. The Ese'eja go to the forest. Natural

materials, such as *tamshi* and *yanchama* (*picheme* in Ese'eja), are gathered from the forest. *Algodón* (*Gossypium barbadense*), *vapehe* in Ese'eja, is a cotton plant utilized for yarn and textiles. Knowledge of the natural resources is vital in developing sustainable and reliable handcrafts.

Artisan Cooperatives of Infierno, Palma Real and Sonene

The local cultural center of Infierno, built by community members, is a wooden building with a metal roof and an attached water tower. Inside are books, videos, artisanal work and more. Next to this new building is an artisan committee *palapa* made of wood with thatched roofing. It is smaller and older than the cultural center, entangled by overgrown vines. Nevertheless, the artisan committee of Infierno plays a large role in the economic welfare and cultural preservation of the community. Members emphasize *minga*, or a cooperative system of working together, known in Ese'eja as *faena*.

The artisan cooperative of Palma Real is well-established and many members from the community are involved. Enough handcrafts were sold by the women to construct a communal two-story wooden building. Here, the artisans of the cooperative display and sell their crafts to tourists. Additionally, the building functions as allocation for meetings, festivities, and guests to stay (as we did). Our team also had the pleasure of purchasing the artisan's handcrafts one afternoon. The women, accompanied by their children, set up their crafts along the perimeter of the communal building and laid them out neatly. More than forty items were catalogued in Palma Real (Figure 9), and seventy objects total were brought back, to place in a material

object itinerant exhibition of the Ese'eja, which will take place in 2016 in the United States and Peru.



Figure 9 Cataloging Ese'eja material culture objects in Palma Real.

Our team also collected artisanal items from Sonene. Sonene's artisan cooperative is the smallest of the three Ese'eja communities. In addition to having a smaller structure for selling handcrafts, less community members are involved in the initiative and more artificial dyes are used in the products. The use of artificial dyes illustrates the balance the hybridization between long-held methods and acculturated practices. Community members informed us that such shortcomings derive from the initial focus being shortsighted. In the original organization of the cooperative by external parties, dimensions of networking or marketing were not emphasized.

In the face of challenges for cultural preservation, long-held knowledge that artisans contain continues to be passed down from one generation to the next. Similar to shamans and medicinal plants, artisans retain substantial wisdom of which seeds produce which color, what vines and bark are most durable and flexible, where such materials are located in the vast jungle, how to best utilize them and the symbolic meanings attached to each resource and handcraft. Many natural materials, like medicinal plants and *yanchama*, are located outside of the declared territory of the Ese'eja.

Collecting *Yanchama*

In order to collect *yanchama* bark to make a traditional dress, a *majadei* in Ese'eja, for a ceremonial dance, a *peki peki* boat from Palma Real and an hour long hike in the dense forest are required. Once the tree is located, it is pounded with a tree branch to soften the bark and allow for an easier removal. This 'sweating out' becomes visible as more of the trunk is pounded. The bark is then removed by severing the outer layers with a machete.

Once the bark has been carried back to the community, several women work together splitting it in half, pulverizing, washing, drying and painting the *yanchama* with natural dyes (Figure 10). The iconography painted onto *yanchama* dresses follow no particular 'code' but they often represent life forms, geometric patterns, and differ from person to person. The dresses are also stylistically varied, some with belts and v-necks, others with short sleeves and scoop necks. Some have intentional holes for ventilation. Andres from Palma Real informed me that in the past, *yanchama* dresses were made with long sleeves to keep the sun off or keep them warm when it grew

cold. Now that jackets are available this is no longer necessary. Also, *yanchama* was traditionally used as a blanket and pillow. Collecting *yanchama* and making a traditional Ese'eja dress is a symbolic process that requires knowledge of one's environment.



Figure 10 Gathering *yanchama* (left) and pulverizing it (right) in Palma Real.

What if there were no more trees with *yanchama* bark due to illegal logging? How would artisan products be made if *tamshi* vines, the main resource utilized for weaving, were also diminished or could not be accessed because of recurrent territory restrictions? Not only would the Ese'eja continually face marginalization and pressure

to change their way of life, but the ecosystem would be even more vulnerable to the cruelty it is enduring.

As time goes by, communities are beginning to see the positive and negative effects of tourism and what a global phenomenon it is. Now that women are involved in artisanship, gender relations have changed and men have a different outlook on the role of women. It is empowering that a woman can contribute to her family in a way not possible before, in more ways than one, and that people appreciate her work (Martin and Voorhies 1975). As emphasized by Yamila from Palma Real, “*Being a part of making crafts, selling them and relying on the jungle gives me strength in the community.*” Through artisan cooperatives, indigenous knowledge of plant materials is valued, a dependence on such resources is emphasized, women are empowered, community is valued, the Ese’ija play another role in the global economy, and cultural preservation is strengthened.

In order to grasp to gravity of the challenges the Ese’ija are facing, one must look at the larger picture through smaller frames. At first health systems and artisan cooperatives may seem completely irrelevant to territory and subsistence strategies. Yet everything is interconnected, affecting each other in complex ways. Like a tessellation, a culture is more multifaceted the deeper it is analyzed. After such an understanding is grounded, one can begin to delve further into the intricacies at hand. The following chapter will address specifically how territory restrictions and an amalgamation of external pressures are transforming Ese’ija subsistence strategies and are threatening cultural preservation and a sustainable way of life.

Chapter 4

DEFORESTATION, POLLUTION & SEDENTARISM

The Ese'eja have reached a point in their culture where external pressures from the Peruvian government, encroaching urban assimilated peoples and profit-making entities are threatening their cultural identity. Adolescents and young adults are beginning to lose their "forest skills" due to outside influences, yet still maintain a connection to their land. This deep connection stems from a long-held symbiotic relationship with the land via sustainable subsistence strategies of foraging. Means of hunting, fishing and gathering are being challenged by outside forces and territory restrictions. This in turn affects the entirety of the fabric of society, particularly cultural preservation.

The elders still hold a deep knowledge of their cultural heritage, the flora and fauna and how to live sustainably in their environment. The elders are aging and if their knowledge is not accurately documented in a timely manner, we as a global society stand to lose the rich oral history and wisdom of the Ese'eja. For example, the elders believe in a powerful spirit in the forest known to the Ese'eja by the name *Ediosikiana*. *Ediosikiana* is both good and evil, he brings good hunting and gathering, but also brings death among the people. Lessons of *Ediosikiana* are passed down from generation to generation. However, the elders point to a dwindling belief in *Ediosikiana* by the younger generation of Ese'eja as a reason why some of the game animals they hunt have disappeared from the forest.

The Amazonian region is rapidly losing its indigenous cultures and their understanding of the interconnectedness of nature. The Ese'ejá, a fishing, hunting and gathering society, have been stewards of their land in the Amazon basin for thousands of years. They have developed a rich cultural history and spiritual connection to the forest that few people in the outside world know or understand. Sharing their knowledge of the forest and culture through their eyes not only empowers the Ese'ejá to navigate their future on their own terms, but provides a unique perspective to the complex issues of land rights in Peru and conservation practices by indigenous fishing, hunting and gathering societies.

The cultural mapping initiative, of which this research is based, chronicles the current Ese'ejá culture, and raises local, regional, national and international awareness about the forces threatening the Amazonian ecosystem and indigenous cultures that subsist within it. The initiative educates the world about the Ese'ejá's knowledge of the biodiversity and bounty of the Amazon basin, and demonstrates how important the forest and waters surrounding the Ese'ejá are to conserve not only for the Ese'ejá, but also for the health of our earth.

The Amazonian region has been described as “The Lungs of our Planet.” Amazonian forests have played a vital role of earth system functioning since the Cretaceous (Malhi 2008:169). However, the rate at which humans are destroying the earth may be beyond repair. The entirety of mankind needs to have a global shift in consciousness, and internalize a sustainable conservation ethic.

This chapter will highlight specifically how territory restrictions and external pressures are affecting Ese'ejá subsistence strategies and means of cultural preservation. As emphasized in Chapter 2, culture is a holistic entity. Therefore, one

can think about these issues is a multifaceted perspective. Not only does deforestation affect gathering, but it affects fishing practices. Pollution and mining do not solely impact fishing, but also hunting and horticulture. This chapter organizes such correlations in a way that addresses their underlying messages and significant impacts on the Ese'eja and the world.

Deforestation & Foraging

“Ese'eja para mí somos las personas que viven dentro de la selva. Sólo en la selva. Si no vivimos en la selva, no somos verdaderamente nosotros. Estoy orgulloso de ser Ese'eja.”

“Ese'eja, for me, are the people who live inside the jungle. Only in the jungle; if not, we are not actually us. I am proud of being Ese'eja.”

-Manuel, a twenty-three year old Ese'eja man from Infierno

The Amazonian jungle is a focal point of the cultural identity of the Ese'eja. It provides sustenance, shelter, inspiration, and fosters a way of life unique to indigenous peoples. The Ese'eja cultivate an existence encapsulated within the biosphere of the Amazon. If the jungle, their home, is at risk of being decimated, then cultural preservation of the Ese'eja is also at stake.

Hunting

The fundamentals of foraging subsistence strategies are similar cross-culturally; however, the practices and meanings involved vary culture by culture. I asked an acquaintance the other day, “Where do you acquire meat?” She replied “the

grocery store.” The Ese’uja obtain sources of meat and animal protein from hunting in the forest. Hunting, performed by men, makes up a small percentage of the Ese’uja diet. Animals hunted include white-lipped peccary (*Tayassu pecari*, Tayassuidae), collared peccary (*T. tajacu*), tapirs (*Tapirus terrestris*, Tapiridae), spider monkey (*Ateles paniscus*, Cebidae), howler monkey (*Alouatta seniculus*, Cebidae), snakes, species of birds, deer (*Mazama americana*, Cervidae), several species of armadillo (Dasypodidae), agouti (*Dasyprocta variegata*, Dasyproctidae), paca (*Agouti paca*, Agoutidae), capibara (*Hydrochoerus hydrochaeris*), and land tortoises (*Geochelone denticulate*, Testudinidae). Nevertheless, when such animals are caught, it is significant to the community, nutritionally and symbolically. In the past, meat from the hunt was shared within the community. Now, it is sold in market economies after the immediate family of the individual has taken a portion. When venturing on a hunting expedition, a small group of men must be stealthy, quiet, not brush their teeth or wear deodorant that would give their smell away, and take with them hunting technology.

Ese’uja Bows, Arrows and Spears

With increased western influence, hunting and fishing strategies now rely upon guns. However, for generations bows and arrows have been chiefly utilized. Members of Infierno, Palma Real and Sonene use a combination of contemporary influences and ancient techniques to forage. The Ese’uja use multiple types of bows and arrows designed specifically for the intended hunt. One bow is made of the palm *Cecropia* (*Cecropiaceae*), which is also utilized by artisans in their handcrafts. It is made into an arc with the harder section made of *tikio*, and is then smoothed with bees wax. The

leaves of the *ubilla* plant, *she-sho* in Ese'eja, also are used as sandpaper to smooth bows and arrows. Another type of bow is for fishing and is made of *espintana* (*Oxandra xylopioides*), *bicha* in Ese'eja. It is flexible and strong, so it is great for fishing because it will be less likely to break. One bow we observed being made by a man named Ceasan in Palma Real was from the *Pifayo* tree (Figure 11). The spiny exterior of the tree first had to be removed, then its trunk dwindled down to a refined bow.



Figure 11 Ceasan from Palma Real making a bow from a *Pifayo* tree.

Arrows are used for hunting and fishing. Don Miguel from Palma Real showed us three types of arrows. One was a spear for fishing that had a speared point and

nylon string wrapped around the dull edge. In the past this string was only *Cecropia* twine, but now various colors of nylon are used. Another arrow was specifically for hunting birds, indicated by its blunt tip and material. It was made from the coffee tree because it is very durable. To make the point smooth, natural grease from the *Canabrava tree* (*Gynerium sagittatum*) is used. The third arrow was intended for all other mammals in the jungle. Its tip is severed and made of *chonta* (*Bactis gasipaes*), for the palm's strength. The fletching is made of bird feathers, such as parrots and macaws. All arrows face the same outward direction to increase velocity.

Such long-held knowledge of foraging technology is beginning to fade with increasing threats to the Amazonian rainforest. Children go on hunting expeditions with their grandfathers and gather with their grandmothers, but once these elders pass away, it is likely that so too will the information they hold. Not only is information being lost, but species variation is diminishing in the Amazon. Species of macaw or monkey once hunted by Ese'ija ancestors no longer dwell in the rainforest, whether this is due to illegal poaching or logging, pollution, or infrastructure development. This was observed during hunting expeditions in the field.

Hunting Expeditions

A member of our cultural mapping team was fortunate enough to accompany an Ese'ija member of Palma Real, Emilio, on a hunting expedition. They set out in the morning and returned victorious, with a peccary, *gno* in Ese'ija. The peccary was killed; its blood drained and brought back slung over Elias' head. After severing the head, Emilio washed the wild boar's body. As in Infierno, the family eats part of the meat first; then the rest is sold within the community and in Puerto Maldonado. This is

the same with fish that are caught. Sonene is too far away from Puerto Maldonado to sell meat and fish that are caught. Unlike Infierno, the Ese'ija of Palma Real utilize all parts of the peccary. The skin is used for drums and the nails for flutes. These instruments were brought out for us to see as we sat watching the cleaning process. The straps on the drums are made of *yanchama*, decorated with *achiote* and other dyes. Members of Infierno find less use for such animal parts, as they are able to obtain imported manufactured items such as drums and flutes from the city. The legs of the peccary are the best meat to cook, as said by Emilio who learned how to skin animals from his parents.

Another skinning and cleaning I was able to observe was of a tapir and deer in Infierno. The house of the hunter and his family was just off a winding road. As I precariously walked along a wooden plank and through a brushy trellis, a pungent scent of raw meat perforated my nasal cavities. This was the house of Nathaniel. It was his son who killed the deer and tapir, called *shaue* in Ese'ija. They were hunted at night in an animal preserve, where hunting is permitted. Only guns were used, no bow and arrows. The head of the tapir was severed off the body and the bodies of both animals lay on palm fronds on the ground. Flies buzzed around the red flesh and dogs gnarled, protecting their new meal. Nathaniel informed us that they were not intending on utilizing the skins, skulls, teeth or toes. He stated that this would have been a "more traditional" Ese'ija practice, although it is still carried out in Palma Real and Sonene. As I sat on the ground amongst the fresh meat, I pondered the spiritual connection between these hunters and the animals they killed. Are such prey animals now only perceived as a means of profit and status? Indeed they still provide sustenance, but do they still hold powerful symbolic significance? If not, could this be due in part to

western acculturation pressures and the lack of cultural preservation of ancestral traditions? Such questions were challenging to ask in a short period of fieldwork, however from my observations and interviews I was able to gain a depth of understanding of the matter.

As populations increase, pollution and infrastructure spread, illegal mining and logging occur, and systems of capitalism and individualism become sensationalized, humans become increasingly distant from the natural realm. In turn, natural resources are perceived as tools for the benefit of humans and our endeavors. The spirit of a tree and the soul of a tapir are neglected, disbelieved and exploited with a justification. A culmination of such perceptions of a human-nature dichotomy is what has led to the current environmental predicaments the world is facing. The Ese'eja have had a long-held symbiotic relationship with the natural world, where sustainable foraging practices have molded a cultural identity unique to their indigenous peoples. Not only are Ese'eja hunting strategies and technologies intrinsically attached to the natural environment, but gathering practices also rely upon the balance of the ecosystem.

Gathering

If I am in the mood for nuts and fruit, I look in my pantry and refrigerator. The Ese'eja look to the jungle. Gathering makes up a larger portion of Ese'eja diet than hunting, as is the case for most hunter-gatherer societies around the world. In a quantitative study of food intake by the Onge hunters of Little Andaman, researcher Bose (1964) declares: "The region surrounding Tokebuea can supply more food than the requirement of the local people" (Binford 1968:326). Other ethnographers, such as Richard Lee (1965) who studied the !Kung of Botswana, Quimby (1962) on the

Chippewa of Michigan, J.D. Clark who researched the Barotse in 1951, Woodbum (1968) on the Hadza of Tanzania, and Huntingford who studied the Dorobo in 1955 all document an abundance of food available to even marginal hunters (Binford 1968). Nevertheless, foraging is increasingly less relied upon with the influx of external pressures, a dependence on agriculture, and a loss of time-honored knowledge surrounding gathering.

Gathering is predominately carried out by Ese'eja women, but men also partake in the activity. Children often accompany women as they gather and elders assist with gathered products once they are in the community. Brazil nuts, *shiwiji jeje* in Ese'eja and *castañas* in Spanish, are the main staple of gathered foods.

For six months of the year, beginning in December and January, Brazil nuts fall to the ground. The nuts are gathered and sold by community members, creating a sustainable means of economic support. By June, most of the shells were water damaged or eaten into by macaws, agoutis and peccaries. One can determine which fruit fell the previous year as the outer shell is completely black and molded. If a shell is still good, it is cut in half and hard-covered nuts immerse. Once they are peeled, they can be eaten or sold. As Brazil nuts are relatively heavy, they are traditionally gathered in a burden basket made of *tamshi*. Such baskets are quite large, extend down the gatherer's back and place weight on one's head via a head strap. This head strap is made of bark called *misa*, or *sawue* in Ese'eja. A burden basket allows for hands to be free for gathering Brazil nuts and placing them into the basket, and using a machete to trek through the jungle.

Gathering Brazil Nuts

While in Sonene, members of our cultural mapping team joined Ese'eja members Don Victor and Santiablo on an excursion to gather Brazil nuts. We walked out of the village, towards the encompassing jungle full of wonder. A Brazil nut tree is one of the tallest trees in the Amazon; host to a plethora of species. Howler monkeys swing from the tree's branches as macaws flutter delicately off the canopy. Sloths cling tightly to the trunk while bullet ants race up and down in lineal formation. I stood in awe in front of the tallest tree in the jungle, with vines wrapping around the thick, wise trunk, which led up to a canopy of lush green where *castañas* and *blue morphos* (*Morpho peleides*) reside in peace. A perfect perch to overlook the rest of the roaring jungle in all its glory. That's only above the ground. There is an explosive network in the roots that can only be explored and understood through a microscope.

Santiablo from Sonene showed us how to acquire *misa* bark while gathering Brazil nuts. He located the necessary tree, stripped a long piece of *misa* bark, and then continued to smooth the piece until there was no bark visibly on it. This bark is also utilized for roof thatching in Sonene. While interviewing Tobias from Infierno, he showed us his burden basket, which he indicated they still utilize to gather Brazil nuts.

Brazil nuts can be sold by members from Infierno and Palma Real in Puerto Maldonado. Sonene members sell their Brazil nuts in Puerto Maldonado and River Alta, Bolivia. Five to fifty sacks, each containing approximately eighteen kilograms of Brazil nuts, are sold in markets. Both men and women gather the *castañas*, children and elders help peel and fill sacks, artisans utilize shells for handcrafts and traditionally the shells were used as ladles and bowls in households. Santiablo shared

that *castañas* are locally utilized in soups and chili sauces, which are coated over beef and chicken.

There are a plethora of other natural resources gathered by the Ese'ejá for sustenance and artisanal purposes, such as *tagua nuts (Phytelephas Aequatorialis Macrocarpa)* are soft and delicious.⁶

Ese'ejá Gathering Practices

In between wading through bodies of water, balancing on massive logs and avoiding spiked trees, I tasted the sweet rainforest. *Zapote (Pouteria sapota)*, *camoea'aja* in Ese'ejá, is a round orange fruit which has seeds surrounded by sweet goo. *Yarina (Phytelephas)* is a soft fruit protected by a hard brown shell with wide spikes. *Pama, quiwua* in Ese'ejá, is the favorite fruit of Margarit of Sonene, one of our collaborators. Another one of Margarit's favorites is *sii. Unguraway* fruit, *majo* in Ese'ejá, are dark purple and grow in a willow-like cluster of vines at the top of a palm tree. In order to gather them, one must throw a stick up and hope some fall to the forest floor. My favorite fruit was *shemikua*, a small red and succulent berry. These berries cluster at the top of a sturdy tree too tall to reach via throwing a stick. One can either wait for the berries to fall, or climb the tree with a machete in hand. This is what Ceasan, an adventurous Ese'ejá man from Palma Real, did. Up he went until he was barely visible. Below, the rest of us waited for the red fruits to fall down on vast

⁶ During a gathering expedition with members from Palma Real I had the opportunity to taste a variety of gathered fruits, nuts and insects, and observe gathering practices.

branches. Once they did, we popped them into our mouths until our bellies were content, and then moved along.

On a damp log we found edible mushrooms, *hi* in Ese'eja, which taste like meat when boiled, according to Santiablo. They must be boiled or else they will make the consumer sick. Growing next to *hi* was "pineapple of the jungle," a bright yellow fungus that also has to be boiled. Within the log, we discovered an assortment of insects and grubs, or *suri* (*Rhynchophorus palmarum*). When cooked, *suri* worms taste like popcorn, but when eaten raw they are flavorless and gush out their insides. It is said that if one eats *suri* worms regularly, it will help with asthma. Beetles and ants are particularly full of nutrients and add to the Ese'eja diet. Snails (*shemo* in Ese'eja), lizards, turtles and their eggs are also foraged by the Ese'eja.

The shells of snails, teeth of peccary and jaguar, claws of tapir and agouti, scales of armadillo and paiche (*Arapaima*), bones of monkeys and feathers of macaws and parrots are all utilized in artisanal work and are revered by community members of Palma Real and Sonene, and some members from Infierno. When these animal parts are not directly obtained by male hunters, female gatherers bring them back to the community upon finding them during their foraging activities.

Also collected during foraging activities are medicinal plants, bark, palm leaves for thatching, fibers and vines, and natural dyes and seeds⁷. The colors that can

⁷ The *achiote* seed creates an orange/red color, *sanipanga* seed makes purple, *guisador* produces yellow, *huito* generates grey/black, and *bashajiya* is a pink flower used for painting. *Wakapupe* is another seed that makes a natural dye closer to brown. Fans, hats, baskets, clothes and purses are adorned with these natural dyes. They can also be embellished with *cashapona* seeds (*Iriarteia exorrhiza*) *shacaca* in Ese'eja, *porotillo* seeds (*d'opi* in Ese'eja), *pona* seeds (*ekidei* in Ese'eja), and *huayruro* seeds, which are black and red and symbolize good luck. These products are constructed out of the fundamental material, *tamshi*.

be extracted from seeds are painted directly onto artisanal materials made of *tamshi* and *yanchama*. While in Sonene, I accompanied Maragrit, Gisella and a young man named Bruno to gather *tamshi* vines.

Gathering *Tamshi* Vines

For two hours with machetes in hand, we trekked through the jungle searching for *tamshi* vines. When we came upon the vine, Margarit and Gisella worked together in pulling it down. After an arduous tug-of-war with the vine, it was cut with a machete, rolled up into a circle and carried back (Figure 12).

The first time Gisella recalls collecting *tamshi* was with her mother when she was four years old. Now Gisella has six children and has passed on her knowledge of the forest. Her eldest daughter of thirteen years old often accompanies Gisella in gathering expeditions. Gisella said that when she is in the jungle she feels *kiebamene didi*, beautiful. I asked her what makes her *Ese'eja* within her soul and she replied while patting her heart with her hand, "soy nativo *Ese'eja*. Tu eres mestizo, pero yo soy nativo." This native identity encapsulates all that is embedded within the Amazonian rainforest and the symbiotic relationship that is shared.

Once back in the community, the vines were unrolled, knobs were severed off, and the outer bark was stripped. Each vine was split down the middle multiple times until it produced a thin strand. The strands were then threaded through a gage in a tin can lid (Figure 12). This pulled away any stray fibers, made it smooth and all the same size. The vine needs to dry for at least one day before it can be used or dyed. Although making one handcraft with *tamshi* is lengthy, there is so much depth and connection to the land throughout the process.



Figure 12 Collecting *tamshi* vines (left) and threading them through a gage (right) with women in Sonene.

Margarit declared with a smile across her face that she feels "contenta y alegre" when she is foraging in the jungle. Our smiles ceased when we came upon a *Tornillo tree* (*Prosopis pubescens*), one of the main types of trees victim to logging. Its trunk twisted upwards towards the sky, branching out protecting its fellow companions, only to be in fear of oblivion and exploitation. An entire habitat vulnerable to the serration of callousness. Light shined through the leaves from the moon's slumber to awakening, hopeful that all will not collapse into darkness for eternity; never to hear the howls of monkeys or brush of macaw wings jolting off its branches again.

Annually, more than two million hectares of Amazonian forest is cleared as road networks expand into remote areas. Additional forces driving deforestation include the expansion of monocrop agriculture, cattle ranching, palm oil plantations, and a global demand for timber. By 2001, approximately 837,000 km² of Amazonian forests had been cleared (Malhi 2008:169). Current projections suggest that deforestation rates will persist until half of the Amazon's canopy forest is eliminated by 2020 (Alvarez 2003:269). Astonishing rates of deforestation continue to surface, as timber is being taken illegally.

Illegal Logging

Illegal logging is a main challenge being faced by the Ese'eja. It occurs at every level, including within the Tambopata National Reserve. The destruction of the rainforest not only creates a rift within the communities of the Ese'eja but throughout the world. Unlike most foreign investors, the Ese'eja share a deep connection with the forest and its trees. For generations, they have sustainably utilized and relied on the resources of the rainforest, nutritionally, medically, and functionally. Knowledge of medicine, hunting and gathering is passed down among the trees that stand tall above the lowest tropic level.

However, long-held sustainable methods are being tested with the hybridization of western influences. Certainly, members of the Ese'eja perform unsustainable practices and are not "pristine indigenous people living harmoniously with the environment" (Smith 2000). For instance, some Ese'eja members do engage in illegal mining and logging in order to support their families and acquire modern consumer goods.

A Personal Narrative of Illegal Logging

As illegal logging encroaches upon communities in the Amazon, including the Ese'ejá, livelihoods, cultural customs, and families are personally affected. On a June afternoon Graciabella, a seventeen-year-old young woman from Palma Real, clutched her ill infant while she ran down a steep cliff face towards a *peki peki* boat. She and her child were taken to a hospital in Puerto Maldonado, where they had to fight to be seen. Their medical documents had been locked away in the community's clinic, which had been shut down and abandoned by external investors who initiated it. The child was given medicine and survived, yet this situation took on a plethora of deep meanings. In addition to the challenge of obtaining medical documents, and not having medical access within the community, this young mother had to face this situation on her own. Her husband recently died in a logging accident while trying to support his wife and new child (Figure 13).



Figure 13 Graciabella caring for her sick child alone (right) as her husband died in a logging (left) accident.

A larger population of members from Sonene is engaging in illegal logging as this is the most vulnerable of the three Ese'eja communities. Sonene is the furthest away from Puerto Maldonado, approximately six hours via *peki peki*, and therefore it is difficult to engage in a market economy. For one, fish and meat products would spoil by the time they reached Puerto Maldonado. Secondly, gas expenditures would outweigh the profits made from selling Brazil nuts, game meat, and gathered fruits. As the ecolodge initiative dwindled, the community is more isolated from the Tambopata Ecotourism Corridor, and the Peruvian government does not provide other economic opportunities. Thus, some members are pressured into the illegal logging industry.

This is a complex issue involving sociopolitical factors stemming from global demands and encroaching pressures. Although some community members take part in illegal logging to support their families, the majority of Ese'eja members advocate against it. In the words of Carlos Dejavisio Poje, President of the Ese'eja Nation: "I worry most about losing the indigenous knowledge of our people. It would be a cultural genocide if we lost our customs and we didn't know how to value what our ancestors valued."

Observations of Deforestation in Sonene

As we walked along the path, set by tractor marks (we presume from loggers, as the only vehicle we saw in the community was an oxen and trailer) we noticed how quiet it was. Everything seemed to be in hiding. Logging activity has most likely dwindled down populations of avian and mammal species. Although multi-colored butterflies were in abundance, and so were the ants and mosquitoes, we did not hear many bird calls, monkey howls or peccary snorts. We came upon a rubber tree, symbolic of imperialism and exploitation. Santiablo swung his strong machete into the tree and it dripped out white, creamy glue. Called *caucho* (*Hevea brasiliensis*), or *pajichawa*, this tree signifies how the Ese'eja were colonized during the rubber boom and the effects that they are still facing. Next to this tree was a *strangler fig tree* (*Ficus obtusifolia*), attempting to suffocate a Brazil nut tree. Fortunately the trunk is too wide that it will survive, but many trees do not make it.

A Brazil nut tree, like the *Tornillo tree* (*Prosopis pubescens*) that is logged for the production of furniture, is not simply a plant that grows and withers. It provides an abundance of nutrients to other living beings, serves as the home of so many species,

and in the case of the Ese'ija is symbolic in their cultural identities. If Brazil nut trees are stripped from the forest, this economic support, cultural identities, habitat for a plethora of species, and balance of the ecosystem will be at risk. If *yanchama* trees are cut down, traditional *yanchama* dresses will no longer exist. If trees which support the *tamshi* vine are logged, all practices utilizing the vine will be altered. When quina-quina bark is stripped from the forest, hanging on tightly to its exported trunk, what will the Ese'ija turn to when faced with malaria? The ecosystem of the Amazon is vulnerable and vital to the world and to the lives of the Ese'ija. The Ese'ija rely on this network of life, from building their homes to subsisting nutritionally, from passing on knowledge of spiritual cosmos to medicinal healing and education. If these trees face the wrath of deforestation, they will suffer immensely, along with the rest of the rainforest and its indigenous people.

Oil Extraction

The Peruvian Amazon is biologically and culturally one of the most diverse regions in the world. Since the 1920s oil exploration and extraction in the region have threatened biodiversity and indigenous peoples. Martí Orta-Martínez and Matt Finer (2010) argue in *Oil Frontiers and Indigenous Resistance in the Peruvian Amazon* that the paradigm of peak oil, united with increasing demand and consumption, is now pushing oil extraction into remote and marginal areas of the world. “Modern patterns of production and consumption and high oil prices are forcing a new oil exploratory boom in the Peruvian Amazon” (Orta-Martínez 2010:207).

The first oil well in South America was drilled in the northern pacific coast of Peru in 1863. Peru became the first oil producing country in South America until

1924, and in 1930 Peru ranked ninth as oil producer globally (Orta-Martínez 2010:207). However, oil exploitation did not occur in the Peruvian Amazon until 1939, under the leadership of the Ganso Azul Oil Company. Oil exploration has even been theorized to have pushed the Ecuadorian-Peruvian war of 1941. It was not until several decades later, in the 1970s, that the first oil exploration boom in the Peruvian Amazon occurred. This led to the most intensive and productive period of oil extraction between 1979 and 1985, leaving devastating environmental and social effects.

Changes related to forest clearing and forest regrowth have been documented by Alvarez and Naughton-Trevez (2003) in a case study of the Tambopata from 1986 to 1997. Figure 14 is an amalgamation of their collected data containing seven different change trajectories pertaining to forest clearing and forest regrowth.

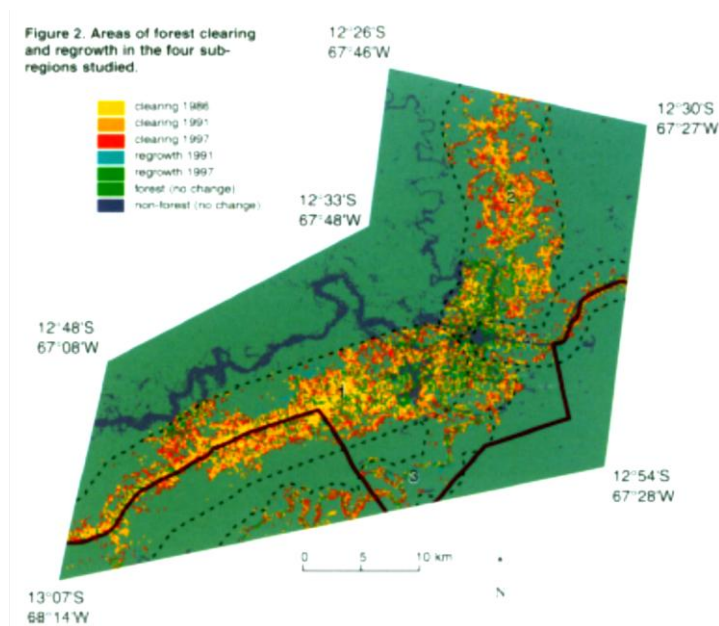


Figure 14 Forest clearing and regrowth documented by Alvarez (2003).

According to Orta-Martínez and Finer (2010), the Peruvian Amazon is experiencing the second oil exploration boom, stretching the non-renewable resource and indigenous lands to their capacity. Although the Peruvian Amazon is a relatively minor source of global fossil fuels, an unprecedented amount of the region is now covered by gas and oil concessions, disseminating over the most intact areas of the territory. It is breaching indigenous lands and unmapped territories of indigenous peoples living in voluntary isolation, thus threatening their way of life and livelihood. Around sixty distinct groups of indigenous peoples inhabit the Peruvian Amazon, including the Ese'eja (Orta-Martinez and Finer 2010:207). What the Ese'eja, and other indigenous groups, stand to lose is a sustainable and safe environment in which to live, subsist and transform culturally from one generation to the next.

Global Forces at Play

When illegal logging and oil extraction occur, extinction of species follows. When the habitat of a bird, amphibian, mammal, insect or plant is stripped away, the nutrients it needs to survive will be lost. Unless it is able to adapt to the new, harsh environment, it will cease to exist, thusly leading to the extinction of more species. When there are no more peccaries and monkeys to hunt, or nuts and seeds to gather, the subsistence strategy of the Ese'eja will be forced to change.

The rainforest is an integral part of Ese'eja identity, from spiritual connections to subsistence, and therefore it is vital for them to protect. By having rights to an increased territory, the Ese'eja have the opportunity to protect all that is encompassed within the forest.

In addition to species being affected by deforestation, climatology is shifting. The deforestation of the Amazon has influenced hydro-meteorological processes in a multitude of ways at local, regional and global scales. A study was conducted in 2009 to determine a correspondence between the patterns of clouds and those of land cover over deforested regions of the Amazon (Wang 2009:3670). It was observed via satellite images that shallow clouds, which are prone to appear over deforested surfaces, are much more frequent than deep clouds, which favor forested surfaces. This is but one demonstration of the empirical evidence of deforestation in the Amazon.

There have been debates over the factuality of climate change and human's role in it. Humans can deny our responsibility in the matter, but evidence of climate change is undeniable. In recent decades, the rate of warming in Amazonia, Peru has been approximately $0.25^{\circ}\text{C decade}^{-1}$. At the end of the Pleistocene, last glacial period, Amazonia warmed at only about $0.1^{\circ}\text{C century}^{-1}$ (Malhi 2008:169). Malhi et al. (2008) concludes that the current rate of infrastructure expansion and integration could reduce forest cover from 5.4 million km^2 (2001, 87% of original area) to 3.2 million km^2 (53%) by 2050 (Figure 15).

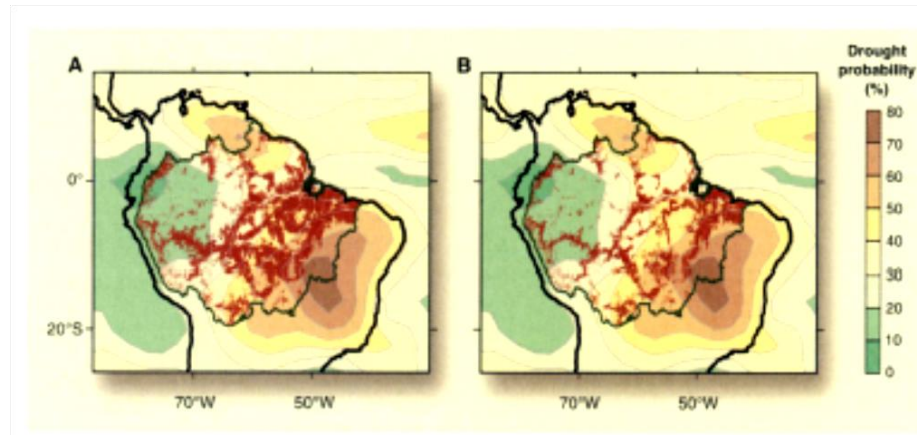


Figure 15 The potential overlap between deforestation and climate change. Potential loss in forest cover (brown) by 2050 (A) business as usual and (B) increased governance scenarios superimposed on the probability of substantial drought.

Alterations in precipitation are the most significant determinant of the climatic fate of the Amazon. As the rainforest is a web of connections that depend on one another for existence, changes in precipitation will drastically affect the survival of copious species.

Not only are the rates of species extinction and climate change due to deforestation critical to the existence of indigenous populations of the Amazon, but to the entirety of humanity. Our lives all depend on one another, and when areas of the world are marginalized and exploited, it affects the balance and wellbeing of all other areas. If there were a decrease in a global demand for logging and oil, then fewer species would be going extinct and there would be less of a current climate change crisis. “In a context of peak oil and growing global demand for oil, such devastating effects for minor quantities of oil are likely to increase and impact other remote parts of the world” (Orta-Martinez 2010:207). In order for the earth and its inhabitants to

survive for generations to come, a sustainable approach to life that does not exploit the earth and its resources but symbiotically utilizes them must be acquired.

Pollution & Fishing

“Sin agua, no hay vida”

“Without water there is no life”

-An Ese'eja elder from Infierno

In addition to a symbiotic and spiritual connection to the rainforest, the Ese'eja rely on the rivers that meander throughout the Amazon. From ancestral cosmologies to present day economic structures, rivers and the species that inhabit them have played significant roles in the daily lives of the Ese'eja. Women and men practice fishing, although they use different techniques; and each pass on their practices to the next generations. Like hunting and gathering, fishing is not solely a means of subsistence. It is an experience of growth, becoming in touch with the natural world, and following the flow of the ebbing river. It is a visual and tactile understanding of how the river connects with the rest of the jungle. Rivers, like trees, are indeed home to a variety of species and the balance of the ecosystem relies on its homeostasis. Just as the Ese'eja are invested in the welfare of the jungle, they are equally passionate and dependent on the rivers. Carlos Dejavis Poje declares with pride, “our [Ese'eja] health is the water.” When these precious rivers become polluted, this relationship alters.

Fishing

Fishing is an integral part of Ese'eja subsistence. When asked, Ese'eja men may currently hunt once a week or once a month. However, fishing occurs almost daily. This depends on the community context as well, as people from Sonene and Palma Real fish more often than community members from Infierno. Nevertheless, fishing is a long-held cultural practice in all Ese'eja communities. Its practice is cooperative, performed by men and women, although different techniques are used by the different sexes.

Fishing with the Ese'eja

While trekking with members from Palma Real through a swath of land towards Lake Valencia, I observed a technique used for obtaining bait. We approached an isolated pool of water, filled during a flood, where small fish were first captured by the bare hands of Don Jacinto and Don Carlos. Then, the men held a palm frond and pushed it from one side to another, bringing all the small fish with it like a strainer. The bait was placed in a plastic bag and carried along. As these fish would have died in the drying pool of water, the Ese'eja had to make a strategic decision regarding from which pool to retrieve bait. Some pools are larger and therefore will be able to be used for future fishing expeditions. With bait in hand, a group of men set out with fishing spears on Lake Valencia.

Another technique used by Ese'eja men is standing on a bamboo raft in the middle of a small pond and casting a commercial net. Fishing strategies are passed down from generation to generation, from which fish to capture and where they dwell,

to how to make and throw a fishing spear, the most efficient ways to clean and gut fish, and the importance they have in their river ecosystem and in the world.

The main fishing technique used by Ese'ija women is not spear throwing but poisoning the fish. In order to do this, women gather the root of the *Barbasco plant* (*Tephrosia sinapou*), *shaka-si* in Ese'ija (Figure 16).



Figure 16 *Barbasco plant* (left) used to poison fish by women in Sonene (right).

Next the root is mashed, and then waved around in the intended body of water. The fish become paralyzed and rise to the surface to be collected and placed in baskets. This poison causes relatively little damage to the river ecosystem or the fish

that are not collected. Unfortunately in some Amazonian cultures, this practice is being replaced by dynamite cyanide fishing. Such modern methods are sought because they require less work and produce larger quantities of fish. However, they are much more destructive and leave permanent consequences to the ecosystem and the health of the consumers.

Dynamite fishing is not just a modern phenomenon in the Amazon but is practiced worldwide. The indigenous Mentawai community of the Philippines are facing the environmental pressures from dynamite fishing in their coral reefs (Vesilind 2002). Once destroyed, coral reefs take twenty to thirty years to recover. It will take even longer to preserve the cultural knowledge of the Mentawai that is embedded within fishing, the coral reef, and the cooking practices of the fish.

Fish Recipes

Fish are cooked by the Ese'ija in contemporary and traditional ways. Many herbs, spices, and ingredients, such as garlic, infused with cooking fish have been traded during interactions with other cultures over years. One long-held cooking technique is stuffing fish with a mixture of herbs and wrapping it in a banana leaf. This dish is called *patarashca* and is commonly served with plantains and roasted cassava, also known as manioc or yucca. Sweet peppers, cilantro, and red onion all play an important role in several Amazonian recipes. One fish dish that can be served for breakfast or lunch is *pango*. Ingredients include five bananas, eleven fish, two peeled yuccas, four tablespoons of salt, one clove garlic, two small red onions, 1/3 cup of cilantro, and Asian sweet sauce (to taste). Many types of fish can be used, including catfish and scarlet piranha (*Pygocentrus nattereri*). Once the fish are cleaned, scaled

and gutted, vertical slits are cut along the length of the fish to allow the flavor to seep in. The fish is rinsed twice and put in a bowl while bananas are boiled and yucca is soaked in the bloody fish water. The yucca and fish are then added to the pot of boiling bananas, along with garlic, onions, salt and cilantro.

Another way fish has been prepared for generations is placing them with garlic and seasonings inside hollow bamboo tubes and heating it over a charcoal fire. The steam inside of the bamboo allows for the fish to soak in the aromas and create a savory soup. On our last night in Sonene, our team had the opportunity to feast upon such delicacies. Alongside Ese'eja men, women, and children, we gathered by the fire to enjoy the catfish and sardines (*Pellona castelnaeana*) caught earlier by the women who gathered them via *Barbasco* poisoning. A refreshing rain fell upon us and afterwards a double rainbow shined through from behind the clouds. Hues of red, blue, green, yellow, orange and purple frayed against the backdrop of grey and dark blue. An elder from the community, Andres, began singing songs in Ese'eja. As he leaned back in an empty boat, children gathered around him in curiosity and awe. It was picturesque: a pink sunset, permeating aromas of fresh fish and charred yucca, enchanting melodies, and a community that is still able to open their heart to strangers even though they continue to be exploited by so many.

Fishing strategies and recipes for cooking fish continue to transform as Ese'eja cultural identity shifts with a globalizing world. New fishing practices and ingredients are molded into long-held methods and dishes. As was seen in fishing, ancestral practices using poisonous vines and spears are still incorporated into the subsistence strategy. In addition, introduced methods such as commercial netting, fire arms and in some areas of the world explosive dynamite are now used. Illustrated in cooking fish,

sustainable techniques are continually practiced, such as steaming fish in palm leaves and bamboo shafts. Additionally, modern accoutrements such as metal pots and traded ingredients are relied upon and enjoyed by Ese'eja members. The Ese'eja are not fixed in time, solely utilizing foraging techniques carried out by ancestors. Rather, the Ese'eja, like all cultures, are in a state of flux, influenced by the global world and their changing environment.

Illegal Mining

A global demand for natural resources is increasingly driving local resource extraction and land use. One reason that the Ese'eja are now taking a less passive stance is that they have seen deforestation, mining, and clashes between indigenous groups and the Peruvian government occurring in other parts of the Amazon, such as the north. They would like to avoid that sort of fate. According to the laws of Peru, even if people own land, the government owns what is under and above it. That means that indigenous people have little control over things such as mining operations.

A major culprit of water pollution in the Amazon is illegal mining. The Peruvian department of Madre de Dios covers approximately 85,000 km² of primarily Amazon lowland rain forest, as shown in Figure 17 (Swenson 2011:2). According to the Ministry of Energy and Mines (1998), the Department of Madre de Dios is Peru's third largest producer of gold, generating 70% of Peru's artisanal gold production (Brooks 2007). However, much of the mining that occurs is unregulated and lacks environmental impact analysis or miner education. The chief resource mined is gold, because the global price for gold is currently high. Over the past decade, the price of

gold has increased 360% with a constant rate of increase of ~ 18% per year (Swenson 2011:1).

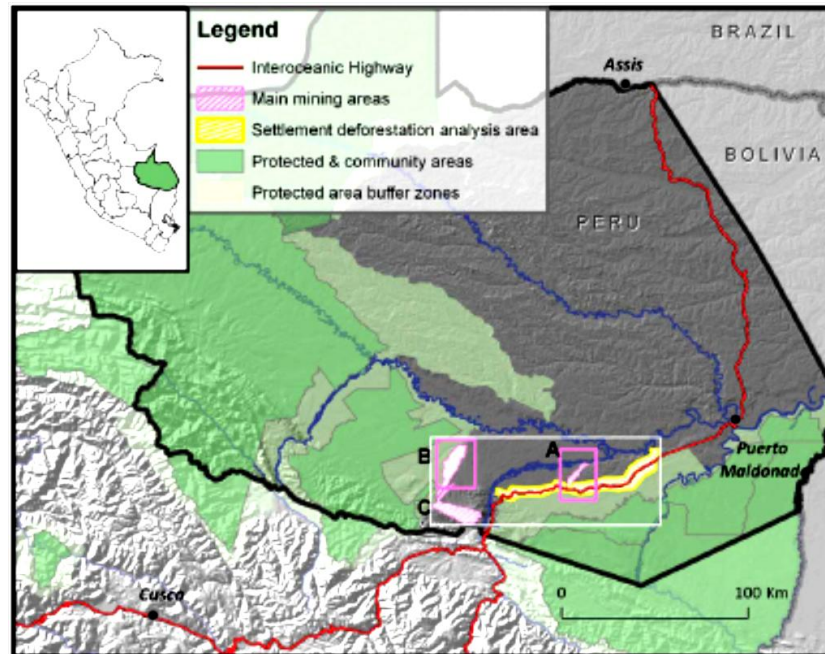


Figure 17 Study area, Department of Madre de Dios. Mining areas denoted by ‘A’ for Guacamayo, ‘B’ Colorado-Puquin, and ‘C’ for Huepetuhe. Shown with a white box of immediate study area, rational protected and community areas and their buffer zones and topography.

In the process of mining, mercury is used to bind the gold together from the black sand. Once it is burned off, excess mercury disseminates into the atmosphere, sediments and waterways, creating an imbalance in the ecosystem. Globally, it is estimated that artisanal mining since 1998 produces 20-30% of world gold production and is responsible for one third of all mercury released in the environment (Swenson 2011:1). Swenson’s results illustrate that recent mining is converting primary forest at

a non-linear rate alongside increasing gold prices (Figure 18). Therefore, mercury imports are rising relative to gold extraction. Other environmental threats caused by gold mining include acid mine drainage and pollution from arsenic and cyanide contamination.

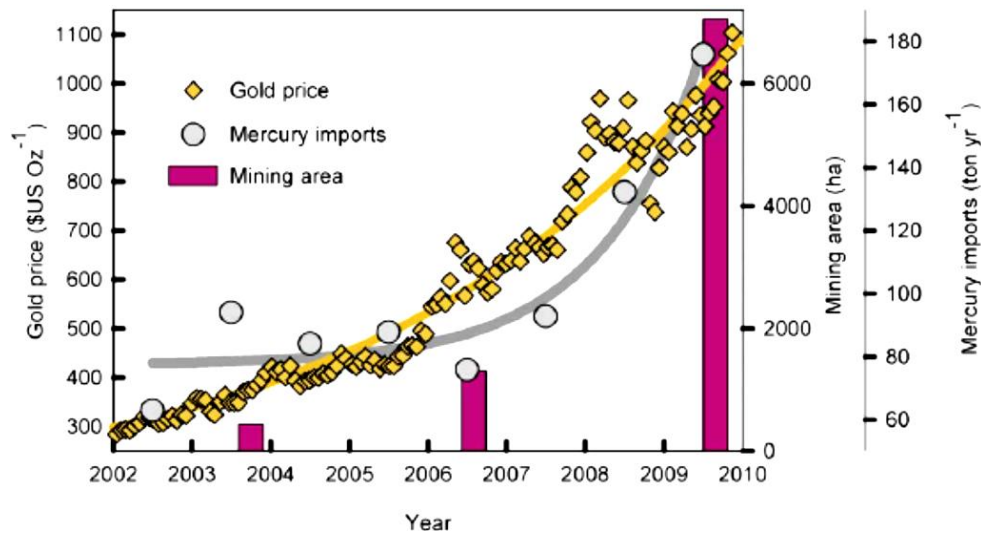


Figure 18 Gold, deforestation, and mercury import increases over time. International biweekly gold prices, forest conversion to mining area and annual mercury imports to Peru are illustrated by Swenson et al. (2011).

Resembling deforestation, mining leads to an extinction of species. Once rivers are polluted, animals such as caiman, turtles, *paiche*, piranhas, *dorado* (*Coryphaena hippurus*), *rataccara* (*Psectrogaster rutiloides*) and catfish will have to change their environment or behavior in order to survive. As was seen with hunting and gathering, long-held methods of fishing will also have to be curtailed. Change is not necessarily a negative concept, but when western influences are the only resort, such as the use of firearms, it becomes a problem. Entire elements are removed from the process of the

subsistence strategy. No longer would grandfathers show young men how to make a hunting bow from *chonta* palm, or gather macaw feathers for the arrow's fletching. Local recipes passed down from generation to generation are at risk of losing key ingredients. Juane de yucca, a hearty dish served for special occasions, calls for fish such as *paiche*, *dorado* and *rataccara*. Other ingredients include large yucca, salt, cumin, pepper, garlic, red onions, *guisador*, palm oil, sweet peppers, cilantro, palm bark, and palm leaves for steaming the fish. Grandmothers that make this dish will eventually pass on, but will the knowledge of the recipe and the livelihood of the ingredients persist?

Generational legacies, passed on by men and women, encompass all branches of a culture. From spirituality to fishing practices, oral histories are told from one generation to the next recalling tales of ancestors past. A spiritual aspect of fishing may also be threatened when the process becomes more concerned with profit than the experience and knowledge gained. This change will ultimately lead to a dichotomy between humans and nature, which the Ese'eja traditionally so strongly deconstructed.

The Ese'eja do not perpetuate dichotomies by raising nature over culture or by raising women over men. Rather, they "affirmed and celebrated the embeddedness of all the earth's people in the multiple webs and cycles of life" (Diamond 1990: x-xi).

Directly pertaining to territory, it is essential for the Ese'eja to have access and rights to rivers in the Amazon. As with the forest, the Ese'eja have a symbiotic relationship with the rivers and are invested in their health. A more abundant and unpolluted river means a richer harvest, a healthier body, and a balanced ecosystem. If the Ese'eja have territory rights to the Amazonian rivers of their ancestral lands, it is likely they will protect them from illegal mining and pollution. Long-held stories of

river-dwelling creatures will continue to be passed down and those creatures will continue to live.

Interoceanic Highway

Another direct polluter of Amazonian waterways is the Interoceanic Highway (IOH), one of the first Integration of Regional Infrastructure in South American (IIRSA) projects. “Economic globalization manifests in landscapes through regional integration initiatives involving trans-boundary infrastructure” (Perz 2013:27). Inaugurated in August 2011, the IOH links three ports in Peru to Brazil and Bolivia (Figure 19). It is intended to integrate the southwestern Amazon into the global economy by providing export outlets by means of Atlantic ports in Southern Brazil and Pacific ports in Peru.

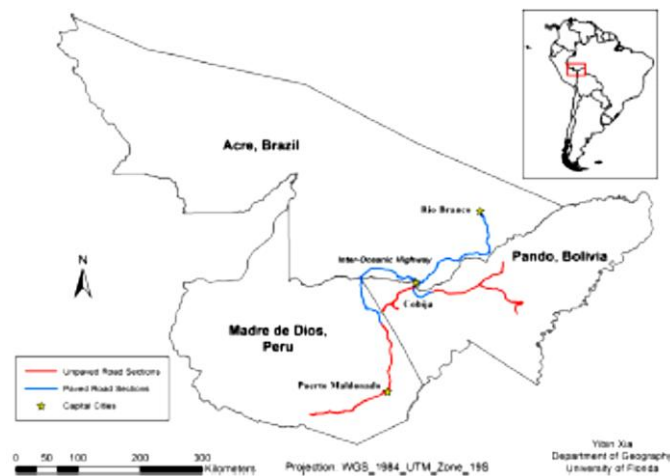


Figure 19 The IOH and other primary roads in the tri-national MAP (Madre de Dios, Acre, Pando) frontier of the Amazon (Perz 2013:28).

Despite the benefits brought by the IOH, environmental and social concerns have been addressed by scholars, environmentalists, non-governmental organizations and indigenous communities. Similar to the Transamazon Highway of Brazil, inaugurated in 1972 by colonists, the IOH presents real implications. Unlike the Transamazon Highway, the IOH spans across countries, calling for multi-national evaluations of trans-boundary infrastructure and its land cover impacts (Perz 2014:28). Concerns include, but are not limited to, increases in illegal hunting and fishing, soil erosion, deforestation for paving, drug and arms trafficking, and pollution of the air, land and water. These are all serious threats to the wellbeing of the Ese'eja and the forest they dwell in. "The effects of forest fragmentation on biodiversity, greenhouse gas emissions and microclimatic conditions are of great importance in the Amazon" (Godar, 2012:60-61).

Pollutants from the IOH, and similar infrastructures, seep directly into Amazonian waterways. Gas emissions and waste products pollute river-dwelling inhabitants that migrate along the rivers. The Ese'eja, and other indigenous societies, rely heavily on fish for a balanced diet. If river ways become increasingly polluted and species of fish die off, this will in turn affect the Ese'eja's ability to subsist via fishing.

The IOH is just one example of acculturation pressures and western influences that are affecting the Ese'eja. The introduction of plastics and toxic chemicals has already resulted in visible impacts. For generations, material culture of the Ese'eja has derived straight from their surrounding environment, thus biodegradable and not harming the balance. With the increase in tourism, technology and accessibility of western products, the Ese'eja are in a vulnerable state of acculturation. For example, foods packaged in plastic are now being sold in the community stores. Before,

everything eaten always degraded back into the earth, so the Ese'eja continue to place food wrappers on the ground. If fruit skins dissolve back into the soil, why wouldn't the encasings of food in the stores do the same? Infierno has begun combating this new issue by digging large holes for which to communally place garbage. This is just one complex example of the changes and challenges the Ese'eja are undergoing and facing due to acculturation pressures.

Global Forces at Play

There is a consistent trend of global demands for single commodities, in this case gold, and the resulting ecosystem destruction due to commodity extraction. Extraction of various resources has reached such proportions that evidence is measurable from space. As the world economy becomes more intertwined, it is more difficult for developing countries to “harness the lucrative forces of global demand in the interest of social and environmental sustainability” (Swenson 2011:1). The consequence is developing nations becoming laden with an unequal environmental burden relative to developed nations, which are importing the raw materials.

All commodities are culturally fabricated to have a particular value. Since we have placed a high value on gold, marking it as a symbol of power, beauty and wealth, its demand increases and therefore the extraction of the resources increases. It is the same for diamonds. Cultural phrases such as “diamonds are a girl’s best friend” and “I want a big diamond wedding ring” cultivate deep meanings about what society values and the lengths we are willing to go to for instant gratification. Diamonds, like gold, are mined and the indigenous populations surrounding such mine sites are marginalized and exploited. Allowing mining (Figure 20) to persist without

environmental regulation, and permitting unrestricted mercury imports, has and will continue to result in negative long term environmental and health consequences.



Figure 20 Illegal Mining in the Tambopata River, Madre de Dios, Peru.

How can this be changed? Is a shift in global consciousness feasible? It may take generations to reach a true understanding of the value and carrying capacity of the earth and its resources. Unfortunately, it may take natural disasters and personal experiences to open people's eyes and see that life on this planet is at risk.

Sedentarism & Horticulture

“La comida es vital para la vida y me siento orgulloso de ser parte de ella”

“Food is vital to life, and I am proud to be a part of it”

-Chakra owner Alberto Viaeje from Sonene

Traditionally a nomadic society, the Ese'ejá have become increasingly sedentary. This is largely a result of the broader political and social transformations resulting from the infiltration of a market economy into the Madre de Dios region (Peluso and Alexiades 2005). As detailed in Chapter 2, the process of urbanization was initiated during the 1960s, following Dominican colonization. This process was extended in the late twentieth century through the creation of “native communities” with titled lands, and through provision of state services, such as schools and health posts (Peluso 2003). As societies become sedentary, there is less capability of nomadic foraging. Other outlets of subsistence are enforced, such as the domestication of plants and animals. With increases in population density and higher demand for yields, such practices become more intensive and less sustainable.

Agricultural expansion in the Tambopata region extended considerably during the 1980s under the macroeconomic populist policies of President Alan Garcia (1985-1990). Garcia's presidency aimed to raise the welfare of underdeveloped communities by providing access to agricultural credit and land titles, promoting farmers' cooperatives, and offering guaranteed markets for products like rice (Alvarez 2003:270). These agrarian policies transformed when Alberto Fujimori came into office in 1990. He imposed a “radical austerity program” based on structural adjustments. In effect, agricultural credit dissolved, agrarian associations were

dismantled, subsidies were removed and taxes imposed, all resulting in a decline in agricultural production, as well as forest extraction activities in the Tambopata area.

The decision to transition from a predominately foraging mode of subsistence to agriculture is not one made freely. As documented by Binford (1968), Lee (1968), Malhi (2008), Sahlins (1968), Speth (1990), Winterhalder (1981) and more ethnographers, the adoption of agriculture by hunter-gatherers has been a multi-linear process that holds no single answer. Nevertheless, it can be derived from the preceding studies that the following factors contribute to such a transition: climate change and environmental pressure, increase in technology, marginalization and acculturation pressures, and increases in population density and sedentarism.

Unlike our western industrial agricultural system, where farmers produce higher yields than demanded by using pesticides, herbicides and genetically-modified organisms, societies that rely on horticulture produce just enough to sustain themselves and the environment. In an ethnographic study of the Kuikuru, horticulturalists of Brazil, anthropologist Carneiro (1961) demonstrated that enough food was produced to meet local demands, and it was at that point that production ceased. The Kuikuru were certainly capable of cultivating several times the amount of food they did, but once equilibrium had been attained, further production was perceived as frivolous (Carneiro 1961).

Such a sustainable mode of production is also practiced amongst the Ese'eja. As stated in oral histories, and observed on ancestral lands, Ese'eja have engaged in extensive cultivation for generations. GIS coordinates of mango trees and bread palm trees were taken near Palma Real's cemetery with the burial of the last Ese'eja

eyámikekwa. These are indicators that the Ese'eja used to inhabit this land, to which they now do not have rights.

Although it is documented that the Ese'eja engaged in extensive cultivation prior to colonialism and sedentarism, the techniques and outcomes were sustainable and balanced by foraging. Increasingly, foraging strategies are less relied upon while horticulture takes precedence. Much of the land surrounding Infierno is being transformed into monocrops and cash-crop plantations. While driving from Puerto Maldonado to Infierno, we passed acres of cultivated Heart of Palm, or *chonta*, where the Ese'eja ancestrally inhabited. Other sectors of land are being cleared for cattle ranching, infrastructure, mining sites, and logging extraction. As members of Infierno are losing much of their surrounding native land, foraging becomes progressively more challenging. Overtime, most families within the community have been pressured to turn to horticulture, as have families in Palma Real and Sonene. Older generations of Ese'eja were taught to grow small gardens by missionaries. These small-scale family farms are locally called *chakras*.

Chakras (Farms)

The word *chakra* derives from the Quechua word 'farm.' Quechua is the language spoken primarily in the Andes. As Peru is geographically diverse, there are various influences from one biosphere to the next overtime. The dry coast, the Andean mountains and the lowland jungle have been connected for millennia by the diffusion of colonialism, ideas, technology, and people.

Trade Routes

Monteo is an elder of Infierno. Hunched over on a wooden bench, Monteo reminisced of his youth when he went on expeditions with his father to the highlands of the Andes to sell arrows, medicinal oils and parrots. During the expedition they wore Ese'eja traditional *yanchama* dresses, and sustained on bananas, fish, meat and turtle. After multiple expeditions, knowledge of the safety of the routes was gained, allowing women to join the adventure. Trade routes to and from the jungle bring forth novel practices and ideas, some sustainable and others not. Most of what is grown in chakras has been imported from other regions; it is not native to the Peruvian Amazon.

Common foodstuffs grown in Ese'eja chakras include bananas, yucca, corn, rice, papaya (*Carica papaya*), sugar cane (*Saccharum*), avocado, plantains (*Plantago major*), zapote, yellow and purple sweet potatoes, guava (*Psidium guajava*), marañón (*Anacardium occidentale*), copazu, mango, bread palm, and pineapple. Food is cultivated mainly by Ese'eja men year round, depending on the amount of rain and the soil's pH balance. Sometimes medicinal plants can be grown in chakras, but more often they are retrieved from the jungle. For re-growth, the method of transplanting is utilized.

A Chakra in Sonene

While accompanying Alejandro from Sonene to his chakra, he demonstrated transplanting yucca, sugar cane and banana plant (Figure 21). After removing the root, it is transplanted two to three meters away and can grow for several years. Some of Alejandro's banana palms have been growing for four years now.



Figure 21 Alejandro's chakra in Sonene.

After transplanting a branch of yucca, which must be planted in softer soil, it will take approximately six months until ready for harvest. Rich in carbohydrates, yucca provides vital nutrients for hardworking farmers. After yucca is harvested, it can be boiled or fermented and made into a local alcoholic beverage, masato, *equipoi* in Ese'eja. After the yucca has been chopped into large pieces and boiled, it is blended with a mallet to a paste. Three to five handfuls of the paste are chewed and spit back in. The pot of yucca paste is covered with banana leaves and let to cool for three to five days. Water is added to the cooled fermented yucca to a desired consistency.

When mixed with sugar cane juice, the beverage is called *bentisho*. In engaging in participant observation, I indulged in a cup of masato in the home of

Maria in Infierno. The particular batch we sipped fermented for five days. Masato is not only consumed during festivities but is utilized as a source of energy when going out into the chakras.

Another fermented yucca beverage is *chichi quitipado*. After yucca has been grated, the water is squeezed out and the grated yucca is boiled. Toasted corn and hardened sugar are added to the boiling pot until the mixture has been boiled down. It is then left to sit and ferment for approximately eight days. Another locally favorite fermented drink is made from sugar cane. If not fermented, sugar cane usually is used to feed livestock, which are eaten or sold.

Common pests of chakras include insects and small mammals, but overall they do not affect harvests. No pesticides or herbicides are used on chakras. Rather, natural resources are sustainably utilized, such as the *mocuna* plant, a weed preventer. Such techniques are passed down from generation to generation, shifting as new technology and methods, such as slash-and-burn, are integrated into the cultivation process.

Slash-and-Burn

Alejandro has worked this chakra since he was a child and it was his father's small garden. He hopes to pass it down to his children once he can no longer work it, and pass on his knowledge. Alejandro has four children, three girls and one boy. His eldest daughter, Dalia, of fourteen years old, has assisted Alejandro in the chakra since she was six. Women and children assist in the chakras mainly with harvesting, transplanting and "cleaning." By cleaning, I refer to a contained slash-and-burn practice, where excess brush is slashed then burned in order to plant foodstuffs. The nutrients from the burned brush go directly into the soil, enriching the chakra. As

stated in Chapter 1, slash-and-burn agriculture is sustainable only if practiced on a small-scale level. Unfortunately, this has not been the case for most of the world's tropical rainforests. Our team helped Alejandro clean his chakra in another way. With machetes in hand, we whacked away at the weeds suffocating young sugar cane.

When asked how working in his chakra makes him feel, Alejandro said very happy and connected to the earth and food. He stated that if there were no chakras, there would not be enough food to provide for the community. Therefore, it is vital for life and he is proud to be a part of that network. Chakras are now an important part of Ese'jeja identity as they merge ancestral practices of extensive cultivation, foraging subsistence, and contemporary systems such as market economies. An elderly woman from Infierno, Galinda, demonstrated this matrix with her cultivation of rice.

Infierno Home Visits

Hard of hearing and blind in one eye, Galinda is the godmother of Don Victor. While interviewing Galinda, I noticed a large pile of rice stalks, similar looking to wheat, on her floor. She stated that she and her husband still grow rice in their chakra, even though it is now attainable from stores in Infierno. They choose to put in the time and labor because it is a part of their identity, and it is cheaper than purchasing it at the store. Next to the pile of rice was a large wooden mortar and pestle used to pill the rice. Many families do not own one any longer because they buy rice that is already pilled. Tobias from Infierno, who has the artisanal burden basket, also addressed this transformation of subsistence. He declared that the diversity of crops in chakras is declining as people can easily purchase native and imported foods without putting in the labor to grow them.

So now, not also is the diversity of native species to hunt and fish declining, but crops within chakras are becoming less diverse. This can be argued against, as now farmers can grow imported foods such as orange and lemon trees. Regardless, it is critical to remember that horticulture does not necessarily supplement hunting, gathering and fishing, but is utilized alongside of them. Alejandro, for instance, goes hunting once a week, fishing every morning, and gathering for Brazil nuts from December to March. Once a month, he voyages to collect *huayo blanco*, a fruit that comes from a tree distant from Sonene. Other fruits Alberto gathers with his wife Matilda throughout the year include *pana*, *shemikua*, *yarina* (*Phytelephas Palmae*), *charichuelo* (*Garcinia madruno*), and *cokino*. Similar to Brazil nuts, meat and fish, foodstuffs harvested from chakras first support the farmer's family, then are sold to families within the community and markets in Puerto Maldonado and Rio Alta, Bolivia.

Market Life

Markets are an amalgamation of overwhelming senses that captivate the uniqueness of a nation. Food stands of spices, herbs, veggies, fruit, breakfast juices, fish, meat, olives, cheeses, *tacacho* and more are sold under the protection of colorful canopies. *Tacacho* is a dish of mashed yucca balls. Pack with nutrients, ingredients include yucca, salt, onions, sweet peppers, cilantro, palm oil, and a mixture cumin, turmeric and ginger. People young and old sit beside their stands of food, newspapers, toys, clothes and cleaning products. Delicacies of corn dough, pork, beef, egg, rice and olives wrapped in banana leaves are prepared to enjoy while perusing the market. Sometimes there are dishes of *salsa de cocona* to dip these delicacies in. *Salsa de*

cocona is a refreshing and versatile sauce, made from a mixture of *cocona* (*Solanum sessiliflorum*), onion, sweet pepper, salt and cilantro. Weekly gossip ensues while profits are made.

A market can be analogous to a chakra, interconnecting at various levels and relying on such networks for sustained survival. Extensive horticulture plays a critical role in the cultural identity of the Ese'eja. Not only do chakras provide nourishment for community members in Infierno, Palma Real and Sonene, but they promote a deep connection to the land and its inhabitants.

Overall, the Ese'eja are at a critical point in their history where cultural preservation and the environment they inhabit are being threatened by external forces. Deforestation, pollution, illegal mining, species extinction, acculturation pressures and restrictions of ancestral territory, to name a few, are transforming subsistence strategies of the Ese'eja and henceforth their cultural identity. Hunting, gathering, fishing and sustainable extensive horticulture are inextricably connected to the equilibrium of the ecosystem. Ergo, if that balance is diminished due to increases in population density, infrastructure, oil extraction or other exploitations of the earth's resources, cultural practices connected with subsistence strategies will be altered, and quite possibly lost forever. The Ese'eja Nation underscores the pervasiveness of such threats and the action that needs to be taken to preserve long-held customs of indigenous populations and the stability of the Peruvian Amazon.

Chapter 5

CONCLUSION

Territory Rights & Cultural Preservation

“It is simple. The Ese’uja need access to their territory. It is a life or death situation.”

- Priscilla Bribiesca

What will it mean for the Ese’uja if rights to ancestral lands are gained? How would gaining land rights affect their subsistence strategies and cultural preservation? Why should this be a concern to a global audience?

Change in Infierno

While sitting on the porch of Manuel’s house in Infierno, we discussed the idea of change. Change in the community, change of cultural practices, Ese’uja ways of life, relationships, subsistence strategies and connections with the rest of the world. Manuel emphasized that in the past, there was a strong sense of communalism and cultural pride. Before there was no infrastructure and pollution, people cooking and eating inside their individual homes, concern about money and lack of species diversity to hunt and fish. Fortunately, Infierno is still very communal, Manuel ensured, but if change is not made there is fear that the community will become highly individualistic. Manuel fears that in ten years Infierno will no longer be what it is today, but a city with no equality among anyone. This is why there is a recuperation of traditional cultural habits on the way.

Maria from Infierno acknowledged that in the past during festivities, there was an abundance of food to go around—meat, chapo or *pacacho*, plantain and masato—but now restrictions on access to ancestral lands and increases in population within the sedentary community make it more difficult to obtain such foods.

Imported foods are sold in stores in Infierno and Palma Real. There are three stores in the Infierno community. The small wooden store fronts are lined with an assortment of chips and candies, breads and muffins, sodas and juices (Inca Kola is a local favorite), accessories, cleaning products, and delicious fried mashed potatoes with cheese. For centuries, what has been eaten has gone right back into the earth and decomposed naturally. Now, with the introduction of toxic plastics that are not biodegradable, it is difficult for the Ese'ejá to piece together that those products would not go back into the earth naturally, as this has always happened. So now there is a rising pollution issue from imported foodstuffs within Infierno and Palma Real.

“Traditional” and “Contemporary” Foods

As I sat in one of Infierno's stores cooling off from the mid-day heat, I began speaking with an older woman, Elda. Elda only spoke Ese'ejá so the help of a translator was needed. Her face was light and wrinkled, hair dark like the soil. Dirt rested under her nails and her soft pink lips covered the missing teeth that rotted out. She was born in Bolivia, has seven children-three of which are still alive- and is a widow. Long-held subsistence techniques are used by Elda's son and husband, including fishing and hunting with bows, arrows and spears. Elda told us about her favorite traditional dishes, including *rosquitas*, *nuto*, *pango*, *empanadas de yucca*, *farina*, *juane de yucca*, *waioshi*, *salsa de cocona*, *tacacho*, and turtle eggs which she

gathered with her father when she was young. *Rosquitas* and *nuto* are breakfast dishes served with coffee or tea. *Rosquitas* are a salty and crunchy snack, made with yucca flour, palm oil, eggs and salt. *Nuto* are small, light and dry cookies made with yucca flour, egg yolks, sugar, essence of anis, sugarcane rum and mineral water (to taste). The possibilities for fillings of *empanadas de yucca* are endless and can be customized to one's taste. Common fillings include celery, onion, egg and chicken. Farina is fermented yucca that is grated and toasted until golden brown. *Shibe*, a refreshing drink, can be made with leftover farina. Water is mixed into the farina, adding sugar to taste. Elda delighted in sharing with us traditional recipes and oral histories of cultural traditions.

Another Ese'eja elder who has passed down traditional subsistence practices to her children is Elisa, a woman of approximately 108 years old from Palma Real.



Figure 22 Elena and Don Miguel in Palma Real wearing *yanchama* dress.

Elders of Palma Real

Standing hunched with a wooden staff, a colorful sun hat (*eja oja* in Ese'eja) made of *tamshi* hovered over her wrinkled face. Two teeth shine through a wise smile of decades of knowledge. I greeted Elena with *achajabi*, a form of hello. Elena sat down on a wooden bench next to another elder, Don Miguel. He was wearing a traditional *yanchama* dress, contrasted with flip flips and a watch (Figure 22). All the sudden, Don Miguel burst into song in Ese'eja. Enchanting rhythms of high pitched exclamations radiated through a toothless smile. Ese'eja songs, like material culture and mythological stories, tell a tale of traditional ways of life and changes that cultural identities are facing.



Figure 23 *Achiote* plant (left) being applied as face paint (right) for a ceremonial dance in Palma Real.

Another way the Ese'ejá continue to keep their cultural customs alive in the face of impending challenges is through dance. On a cold morning in Palma Real, community members began painting their faces with *achiote* seeds and dressing in traditional *yanchama* dyed with *achiote* in preparation for an afternoon of ceremonial dancing organized for our cultural mapping team (Figure 23).

Ceremonial Dance

Female dancers from Palma Real let their long black hair down and both men and women were barefooted. One man stood out, wearing a headdress with macaw and parrot feathers. This individual was representing a shaman, as they are the ones

who wore such headdresses in ceremonial dances in the past. The first dance began with men and women holding hands and forming a circle. After moving to the right, they would all step back then move to the left. Don Miguel led the group in song and directed the dancers as to which direction to go in. The second dance began with two lines of men and women holding hands, led in song by the Ese'eja man representing the shaman. Everyone stepped forward on their heels, formed a circle with the leader in the middle, moved in closer and began circling in a patchwork of hand holding (Figure 24). Then they split off into two circles of males and females, with Jalina leading the women zigging in and out of the circle of men. An older woman skipped into the center of the large circle and motioned cupping her hands up to other women's mouths. One by one, men began falling down and were dragged off to the side by women.



Figure 24 Ese'eja in Palma Real dancing in traditional *yanchama* dresses.

After the dance, the members took a group photo and then individual photos for their Facebook profiles, believe it or not. The Ese'eja of Infierno, Palma Real and Sonene are not isolated or static in time, fixed to an irrational image of "the primitive indigenous." A great number of the Ese'eja are hybridizing traditional and modern practices into a new cultural identity that pushes against the notion of the "Other." In all three communities some families have televisions, and even solar panels provided by the Peruvian government. This enables the Ese'eja to be more informed and connected with politics surrounding their territory and rights. Mario from Infierno declared that he saw a news report of the Ese'eja becoming a Nation on his television, which was the largest media representation of the Ese'eja thus far. In addition, this western technology has provided a new outlet for entertainment and communal engagement. While giving a presentation of our cultural mapping work to the members of Sonene, we had a thirty-minute window before a popular soap opera came on the community television. Overall, not all changes and western influences are interpreted negatively by the Ese'eja. Some changes are uplifting to the communities, while others are burdening. While various influences are sustainable, most are not.

Sustainable Future

The Ese'eja are at a critical time in history, navigating their own cultural identities of sustainability, and challenged with notions of sustainability and progress. Indeed the rest of the world has much to learn from the Ese'eja in terms of sustainability; however, every Ese'eja does not reject modernist paradigms. Ese'eja culture is as dynamic as any other and has changed and adapted according to their experiences and their history. Although the Ese'eja are being forced to limit particular

ways of life due to external factors, not all Ese'eja members see this as negative change. In fact, western practices that have been introduced are certainly welcomed and preferred by some Ese'eja. For instance, with the increase in horticulture and therefore food yields, more members can choose to specialize in other skills. With the influx of western clothing, an Ese'eja does not have to spend days making clothing from *yanchama* bark to keep warm in the night. As guns were introduced, hunting became faster and easier. To a degree, there is pressure over the Ese'eja to change their long-held practices. However, many have chosen to develop hybrid practices, and in some cases Ese'eja members have become very "modern". Nevertheless, the Ese'eja remain connected to the earth and embody a symbiotic relationship with the natural realm.

The balance of the ecosystem of the Amazon is being increasingly disrupted by over-exploitation, deforestation, pollution, overpopulation, mining and acculturation pressures. According to Malhi (2008), economic development of the Amazon must be managed so that it occurs where appropriate and sustainable, in a method that maintains natural climate resilience that the intact jungle provides. Such management would preserve the Amazon's carbon store and its immense biodiversity, contributing towards mitigating global warming and assisting that biodiversity to adapt to climate change. It is important to remember that deforestation is not only occurring in the Peruvian Amazon but the Amazon at large, spanning across most of South America. Godar et al. (2012) conducted a deforestation case study from 1987 to 2007 in four Brazilian municipalities: Medicilândia, Brasil Novo, Anapú, and Pacajá. Figure 25 illustrates land-cover within these municipalities; degradation defined- as the

conversion of any pixel representing forest to farming, less-advanced stages of forest succession, and roads or urban classes.

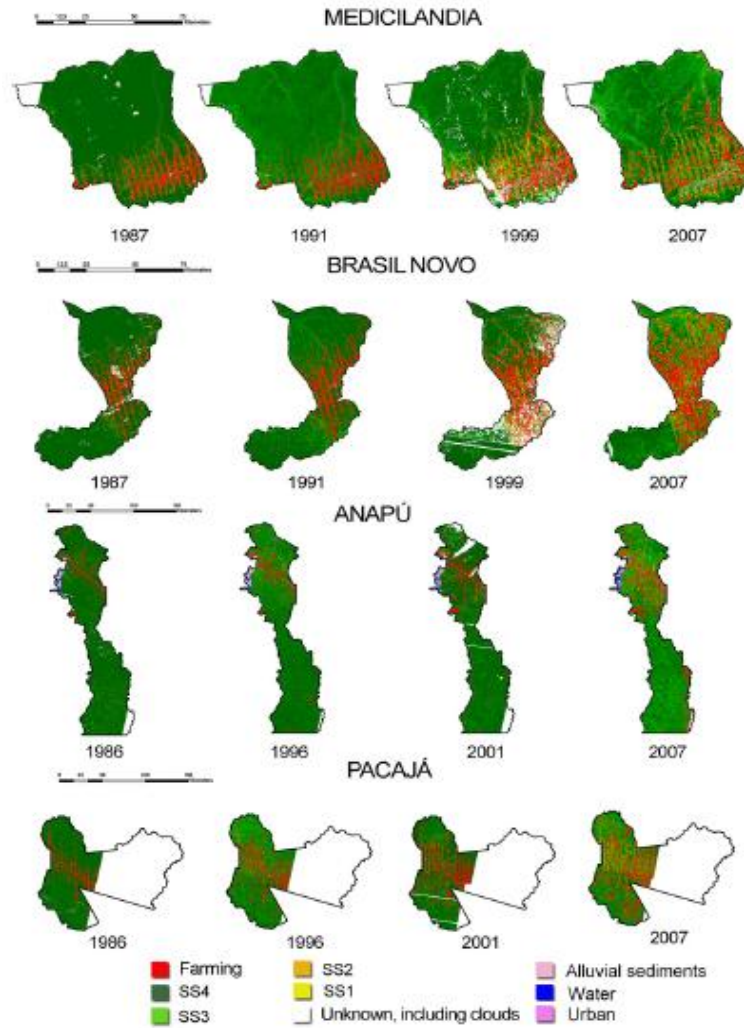


Figure 25 Godar et al. (2012) analysis of deforestation in four Brazil municipalities.

Mahli (2008) proposes that a management plan for preservation should include the following critical aspects:

(1) keeping the total extent of deforestation safely below possible climatic threshold values in a matrix that includes large protected areas with limited fragmentation and managed landscape connectivity to preserve species migration corridors and forest transpiration services. (2) Controlling fire use through education and regulation, probably for net economic benefit. (3) Maintaining broad species migration corridors in ecotonal areas that are most likely to show early signals of climate impacts. (4) Conserving river corridors to act as humid refugia and migration corridors for terrestrial ecosystems and as sedimentation buffers and refugia for aquatic systems (Malhi 2008:171).

With individual and institutional applicability, the balancing act of sustainability is intertwined within environmental, social and economic spheres. As Western society seeks “progress”, the values of consumerism, capitalism, technology, and a homogenized global economy are illuminated. This correlates to a decrease in the value of human relationships with the earth and with one another, leading to grave consequences.

One root of sustainability is the relationship between humans and nature. Human-nature dualisms characteristically define human in opposition to that which is natural, physical or biological. Such polarizations are maintained by rejecting what links humans to the natural, and by treating human–environmental relationships in terms of “what is thought to separate and distinguish them, especially reason and its off-shoots” (Jamal and Stronza 2008; Plumwood 1993). According to Jamal and Stronza (2008), alternatives to mechanistic ways of viewing the world are needed. The relationship between humans and nature must be transformed to reconceptualize the human and the self, principally with respect to ways of relating to nature in less

instrumental ways. According to ecofeminists, androcentric and anthropocentric biases of western civilization must be dismantled in order to reweave new stories that acknowledge and value the earth and the human relationship.

Prior to the sixteenth century, there was a widespread belief in the cyclicity of life, stemming from Greek philosophy, and influenced by the Hindu concept of Samsara. Greeks believed in “recurring cycles of better and worse, excluding the possibility of permanent advance or progress” (Fay 1947: 233). Seeking progress would break down the division of humans from the divine and therefore would interfere with the fixed order of the universal cosmos. Therefore, when war and famine occurred there was still hope and reassurance that a state of balance would be on the horizon. This philosophy spread to other cultures and impacted the trajectory of the world. Therefore, not only is a measure of “progress” not universal, but the concept of “progress” has not always been a universal thought process.

One imperial notion during the age of colonialism was pinnacle perfection, rather an idealized progress of man. Evolutionists such as Rene Descartes, Bernard Le Bovier de Fontenelle and Herbert Spencer emphasized a state of man where perfection and complete happiness could be achieved (Fay 1947; Cohen 1989). With increasing scientific advancements during the Age of Enlightenment and the strengthening of the concept of evolution, Greek philosophies of oscillation were viewed as superstitious and insignificant to understandings of the world. This interpretation has carried out into modern day society, where value and the concept of “progress” is associated with science, achievement, the future, the individual, and a blind eye to the destruction created in the process.

Anthropologists Lewis H. Morgan and Julian Steward, and evolutionists Descartes, Fontenelle and Spencer, among many other scholars and intellectuals, have thoughtfully discussed how to define “progress” and what that means for the world (Steward 1953; Gould 1987). Progress is a flux, a change, a conscious improvement of survival. In order for our species and copious other species of flora and fauna to survive, a change and improvement must be made. Writer H.G. Wells calls for a “reconstruction of society in which there would be liberty and equality for the individual and peace in a world community” (Fay 1947:246). How will the world reach a peaceful state? The world needs a rebalance of oscillations.

Progress is directional, usually equated as a forward thinking concept. However, in order to salvage this earth, historic fundamental lessons of the universe must be drawn. Humans need to deconstruct the dichotomy between ourselves and nature, and construct a paradigm constituting the meaning of “progress.” This shift towards a deeper connection with nature will vary from one culture to the next, yet it is imperative that all societies actively take part in this conscious effort. As the Ese’ija challenge polarizing notions of maintaining a “traditional” society and developing “modern” practices, they ultimately seek to preserve their culture and subsist in a balanced environment. Only when progress is seen as moving in a more natural state, in tune with the cosmic oscillations, and with apparent benefits for all organisms, will the direction transform from backwards to forwards. Then, the cycle will begin again and a horizon of light may be possible for the earth.

Results of Cultural Mapping Initiative

“It is important for us to do this cultural mapping. We have the hope that this team will strengthen our cause.”

- César Augusto Jojajé (Translated from Spanish by Priscilla Bribiesca)

External and internal pressures continue to threaten the way of life for the Ese'ejá. The sustainability of Ese'ejá ancestral lands and the organisms that dwell within them are also at stake as the world shifts further into the twenty-first century. Since 2000, Ese'ejá leaders have requested access to their ancestral lands from the Peruvian government. However there has been little response. If there is a response, it is a rejection of the problems the Ese'ejá currently face. This is one of the reasons why the Ese'ejá Nation is seeking assistance internationally.

It is important to recognize some of the limitations of the cultural mapping initiative in which I participated and out of which this thesis stems. These limitations include its short duration of three weeks, that not every Ese'ejá supported the initiative fully, and that we requested specific information about “traditional” life ways. With these limitations, I am unable to fully grasp the complexity of the lives of the Ese'ejá, their problems, choices, inside quarrels, let alone their cosmology. A significant amount of further fieldwork is required to obtain such in-depth knowledge. Nevertheless, we continue to work alongside the Ese'ejá to accomplish the goals we set up collectively.

The cultural mapping initiative's long-term goals, created in partnership with the board of the Ese'ejá Nation, consist of cultural and historical preservation, educational programming, and conservation. With assistance from outside collaborators, such as a lawyer- Priscilla Bribiesca-for indigenous rights based in

Washington D.C., ACEER, Rainforest Expeditions, FENEMAD, and our cultural mapping team, the Ese'ejá will tell their story through their own eyes about their culture, history, spiritual connection to the forest and the outside pressures they are facing. "Cultural mapping gives us force and strength. It encourages the empowerment of cultural knowledge and evidence that can be used to prove our threatened condition to Peru," declared Carlos Dejavisó Poje.

Cultural & Historic Preservation

As a result of the cultural mapping initiative, the UD research team will work with the Ese'ejá to produce a strategic community plan (*Plan de Vida*), cultural mapping documentary book, material object exhibition, and multimedia components documenting indigenous cultural practices, land ethic and spiritual connection to the ecosystem, and the intense outside pressures they are facing. Additionally, and in collaboration with the University of Delaware Department of Art History and University Museums during academic year 2014-2015, a public material object exhibition will be held on UD campus. Material objects will include Ese'ejá artisan handcrafts, bows and arrows, a burden basket, *yanchama* dresses, hand-painted mythological illustrations, and more. Stories of the Ese'ejá will be woven visually throughout the exhibition.

Carlos Dejavisó Poje and César Augusto Jojajé traveled to UD campus for a week in October 2014 to review these material objects with art conservation students and attend conferences on indigenous rights. "We are making history through this visit to the U.S.," quoted César. Dressed in traditional garb, Carlos, César, and cultural mapping team members presented our results for Board members of the National

Geographic Genographic Legacy Fund at National Geographic Headquarters (Figure 26).

When asked about the meanings of the Ese'eja traditional clothing, César responded “When I wear these clothes, I feel proud. In my own language and culture, these clothes give me force. I feel strength when I put on my headdress and necklaces. These are teeth from a jaguar, which has a spiritual force. These are teeth from a peccary, which shows the death of our ancestors. Wayruro seeds give me balance.”



Figure 26 Ese'eja leaders and Cultural Mapping Team members presenting at the National Geographic Headquarters in October 2014.

One way Ese'eja elders are currently passing on their traditional knowledge of fishing, foraging, healing practices and the ways of the world are through illustrations and mapping. The illustrations below (Figure 27) were drawn by an Ese'eja member from Palma Real. They were made because of a request from the cultural mapping team for the purpose of the documentary book. They tell the myths of how the Ese'eja came down from the sky world and why there is such a diversity of aquatic life in the rivers. It is said that a whale swam up through the rivers of South America to where the Ese'eja inhabited. A brave Ese'eja man attached machetes to his arms and legs, dove into the belly of the whale and cut it into pieces. Every piece of whale became a different species of fish. Such diversity sustains the Ese'eja's nutritional balance.



Figure 27 Ese'eja illustrations of their origins (left) and sea creature diversity (right).

This multidisciplinary project has received the support of internationally known organizations, such as the National Geographic Foundation, which will support the publication of the documentary book. This book will have two versions, one written in Spanish (distributed locally in the Madre de Dios region) and one in English (distributed abroad and used as a source of sustainable funding to continue ACEER's educational programming), with Ese'jeja terms throughout both versions and will be primarily authored by the Ese'jeja. The content of both printed and online materials will contain stories, maps, interviews, illustrations, photographs, and excerpts from scholars that explain certain aspects of the Ese'jeja culture and environment to a wider audience.

These cultural preservation outcomes will have an educational cascading effect into fifteen additional indigenous communities facing similar outside pressures and challenges in the Madre de Dios region. Assimilated Ese'jeja living in Puerto Maldonado may also discover and rekindle a connection to their cultural past. In all, more than seven-thousand indigenous individuals will benefit.

Educational Programming

One of the expected outcomes of the project is not only to impact learning about the Ese'jeja specifically but also learning related to broader themes such as environmental and cultural sustainability, and cultural change. Therefore, information gathered will be used to develop educational materials and accompanying curricular experiences through ACEER's ¡Amigos! Program. This program has already touched the lives of one million individuals worldwide. As recipient of Peru's 2013 National Award for Environmental Citizenship, and with an extensive outreach network

sharpened over twenty-one years, the ACEER is uniquely positioned to serve as a partner for our work with the Ese'ejá. Outreach will include: 1) Disseminating learning materials in Ese'ejá primary schools. 2) Integrating Ese'ejá culture into the curriculum of non-Ese'ejá schools in the Madre de Dios region. 3) Giving voice to the Ese'ejá by sharing results with decision makers in the Peruvian ministries of Women and Social Development, Interior, Environment, and Culture. 3) Engaging the global community through lectures, symposia, the English version of the book and multimedia elements.

This educational component of the project will be offered to the Ese'ejá and neighboring community schools. Beneficiaries of the project will extend beyond the Ese'ejá into other indigenous communities in Peru's Madre de Dios region via a cultural mapping "toolkit". Like most indigenous groups in the Amazon, the Ese'ejá are facing challenges to their culture and ways of life. The telling of their story, the capturing of their world-view, conservation ethic, and their plight will shift the conversation that to date has often seen people like the Ese'ejá marginalized, invisible, and powerless.

Conservation

This third goal is to empower the Ese'ejá to create a sustainable community plan. The *Plan de Vida* is a strategic plan for the future of the Ese'ejá Nation including, but not limited to, dynamic GIS mapping of existing uses and characteristics of their ancestral lands. This is also a living document driven by the Board of the Ese'ejá Nation to set a strategic direction into the future that balances

their desire to preserve their culture, with the need to face challenges of the encroaching developing world around them.

Hopefully, by recording Ese'eja oral histories, marking GIS coordinates that correlate to maps drawn by elders of ancestral lands (Figure 28), documenting field notes and illustrating, through their own words, what these lands mean to them and why they are vital to obtain rights, our cultural mapping team will help the Ese'eja in gaining territory rights. On a larger scale, hopefully we will play a role in long-term Ese'eja cultural preservation and environmental stewardship.

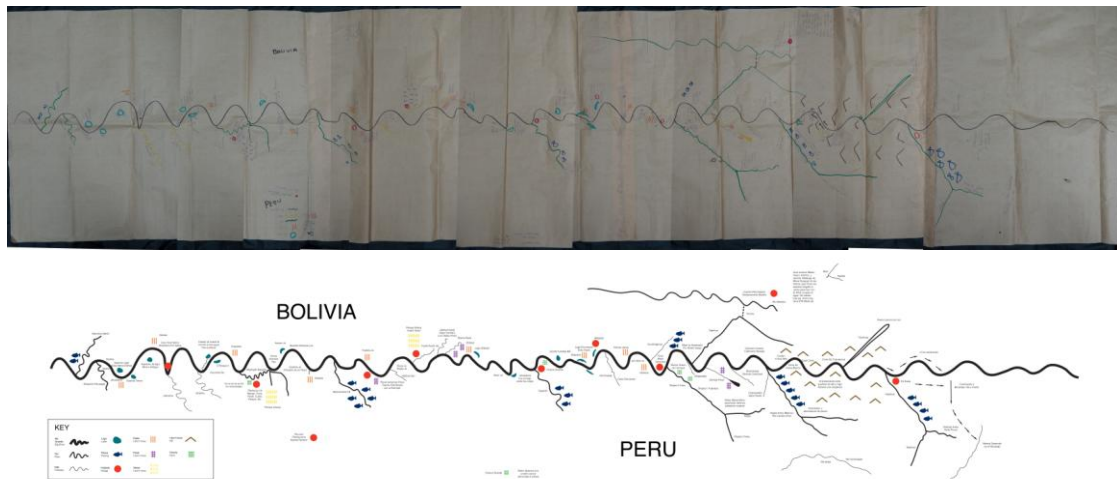


Figure 28 Map drawn by Ese'eja elders (top) designed on GIS computer software (bottom).

Complete loss or fragmented indigenous knowledge on a global scale is one of the great catastrophes of modern times. By documenting the process of our collaborative proposed cultural mapping and *Plan de Vida* with the Ese'eja of Peru, the disseminated results can support other indigenous communities in the region and

around the world interested in documenting and preserving their own culture. Specifically, our cultural mapping initiative will result in increased global awareness about the cultural loss and environmental threats facing the Ese'eja. This is one of the main objectives of the newly formed Board of the Ese'eja Nation.

The educational programming component will ensure that the Ese'eja children understand their environment and take pride in their heritage. César states that “there is not so much a renovation of cultural pride, but of empowerment. The children always request the leaders to show them Ese'eja ancestral lands. They have an interest in our long-held cultural ways.” The tangible products of a documentary book, multimedia components and *Plan de Vida* will raise global awareness and hopefully give the Ese'eja more control over their land allowing them to continue to conserve their environment.

Anthropological Framework

From an anthropological perspective, this multidisciplinary research adds to our understanding of the way that subsistence strategies are used in the presence of external pressures and cultural, economic, and environmental challenges, the way that indigenous peoples adapt to these pressures, and the way they use their traditional ecological knowledge (TEK) to develop new sustainable uses of their land. Ethnographic methodology in anthropology is moving away from the historical practices posed by famous anthropologist Bronislaw Malinowski, solely being the observer with pen in hand, waiting to capture a moment of the ‘Other’ with whom you are researching and living with. According to Paulo Freire, in his note on defining libertarian teaching in *Pedagogy of the Oppressed* (1997), “It is not our role to speak

to the people about our view of the world, nor to attempt to impose that view on them, but rather to dialogue with the people about their views and ours.” This speaks to the core tenets of modern ethnographic fieldwork. Today, anthropologists engage in ethnographic practices where suspending judgment and ethnocentrism⁸ and being critically culturally relativistic are essential (Halvaksz 2014).

Anthropology bridges gaps between cultures, and at the same time highlights the differences around the world. It provides a mode of consciousness where a deeper understanding of others, and consequently of yourself, is emphasized. In the last fifteen years, anthropology has moved in the direction of activism and application, both in the field and in the teaching of anthropology. “Activist research is a sustained commitment to the work, where you can witness changes in people, families and institutions (Guajardo 2008).” This involves looking at research as a way of life, rather than as an initiative or program. Sustained work can very well lead to positive changes within the community and within the way one understands and perceives the world around them.

In a cyclical state of chaos, people are looking to anthropology to assist in creating a more sustainable and peaceful world. In activist anthropology, Guajardo (2008) advocates the rupturing of

The traditional paradigms and use methods as an instrument for change. In rupturing the paradigmatic membrane through research and inquiry, we can

⁸ Ethnocentrism is the belief and feeling that one’s own culture is best (Spradley 1980). Critical cultural relativism is a perspective and approach to the world that attempts to understand the assumptions and beliefs that underlie behavior (Dettwyler 2011).

deconstruct the tools-methods that have historically kept knowledge and power for the privileged. We must decolonize the research process to respond to the strengths and particular needs of the local community (Guajardo 2008).

Concluding Remarks

Amazonians are open and adaptive, and have always interacted across ethnic lines to incorporate new practices, institutions and people into flexible life ways (Cepek 2013:367). The Ese'eja are no different. They do not form a static image of prehistoric hunter-gatherers vulnerable to colonialism and exploitation. Rather, the Ese'eja, like all cultures, change with the changing times. Peluso and Alexiades (2005) declare that the popular conception of Amazonia as a place inhabited by forest peoples is also outdated. In fact, most people today in the Amazon live in urban and pre-urban environments. Also, some long-held practices are maintained while others are replaced with newly acquired methods. While a number of Ese'eja fight for a sustainable mode of existence, other members argue against this. Individual to individual, ever-transforming Ese'eja cultural identities are molded, influenced by external and internal factors.

Reflections

On our last day in Ñape, I made my way to the beach to find solace in the breeze. I dipped my toes under the cool sand to keep away the pesky flies and mosquitoes. As I sat watching the Tambopata River flow by, entrenched by the green jungle canopy, hovering blue sky and howler monkey calls in the distance, I felt embraced by the Amazonian atmosphere. The photographers came to the beach as

quickly as the sunset. Hues of pink, purple, blue, yellow, orange and blending shades of white casted shadows on the jungle landscape. Another day came to a close as the abundance of night-life awoke. In due time, the domed sky glistened with the Milky Way as peering eyes speckled throughout the darkened horizon.

External and internal pressures continue to threaten the way of life for the Ese'eja, sunrise after sunrise. The presence of Ese'eja ancestral lands and the organisms that dwell within them are also at stake as the world shifts further into the twenty-first century. Nevertheless, in the face of deforestation, pollution, and western influences, the Amazon continues to fight back. Howler monkeys release echoing howls to establish grounds, while caiman stealthily lurk in the rivers. Macaws soar proud and strong above the trees, stalked by armies of ants and other insects. The Ese'eja will persist, fighting for rights and sustainability adding their own calls of the wild.

The Ese'eja foster ways of life that are symbiotic with the natural world. This long-held relationship between the Ese'eja, the rainforest and its inhabitants has always been transforming. However, it is being increasingly challenged by a variety of factors, particularly territory restrictions of their ancestral lands. With limited or denied access to ancestral territories, particular cultural practices and indigenous histories are beginning to fade. Encroaching external factors, such as deforestation, illegal mining and infrastructure development, continue to have severe impacts on Ese'eja subsistence strategies and cultural preservation. "This is a matter of life and death," declared Carlos Dejavis Poje. Within the framework of a cultural mapping initiative, this thesis underscored how external forces have transformed Ese'eja cultural identity and ways of subsistence. Significant strides still need to be made, but

working collaboratively is the first step towards gaining territory rights, preserving culture and maintaining a sustainable environment.

REFERENCES

- Adams, Carol J.
1993 *Ecofeminism and the Sacred*. Continuum, New York.
- Alexiades, Miguel
1999 Ethnobotany of the Ese' eja: Plants, Health, and Change in an Amazonian Society. Ph.D. Dissertation, The City University of New York.
2009 *Mobility and Migration in Indigenous Amazonia: Contemporary Ethnoecological Perspectives*. Berghahn Books, New York.
- Alvarez, N. L., and L. Naughton-Treves
2003 Linking National Agrarian Policy to Deforestation in the Peruvian Amazon: A Case Study of Tambopata, 1986-1997. *Ambio: A Journal of the Human Environment* 2(4): 269-274.
- Ames, Kenneth M.
1999 Myth of the Hunter-Gatherer. *Archaeology* 52(5):44-49.
- Azzam, T.
2014 Mapping Data, Geographic Information Systems. *New Directions for Evaluation*, 2013 140:69-84.
- Bernard, R.
2011 *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Altamira Press, Lanham, Maryland. (5th ed.)
- Binford, Lewis R.
1968 Post-Pleistocene Adaptations. In *New Perspectives in Archaeology*, Sally R. Binford and Lewis R. Binford (editors). Pp. 313-341. Aldine, Chicago, Illinois.
- Boas, F.
1896 The Limitations of the Comparative Method of Anthropology. *Science* 4 (103):901-908.

- Brooks WE, Sandoval E, Yopez MA, Howell H
2007 Peru Mercury Inventory 2006: U.S. Geological Survey Open-File Report 2007- 1252. Available <http://pubs.usgs.gov/of/2007/1252/>. Accessed 2009 Dec 15. 55 p.
- Burton, Michael L, and Douglas R. White
1984 Sexual Division of Labor in Agriculture. *American Anthropologist*. 86(3):568-583.
- Cameiro, R. L.
1961 Slash and Burn Cultivation Among the Kuikuru and its Implications for Cultural Development in the Amazon Basin. *Anthropologica Supplement* 2:47-67.
- Cepek, M. L.
2013 Indigenous Difference: Rethinking Particularity in the Anthropology of Amazonia. *The Journal of Latin American and Caribbean Anthropology* 18(2): 359-370.
- Chang, K.
2007 *Introduction to Geographic Information Systems*. McGraw-Hill, Columbus, Ohio. (4th ed.)
- Chibnik, Michael.
1994 *Risky Rivers: The Economics and Politics of Floodplain Farming in Amazonia*. University of Arizona, Tucson, Arizona.
- Cohen, Mark N.
1989 *Health and the Rise of Civilization*. Yale University.
- Collier, J. and M. Collier.
1986 *Visual Anthropology: Photography as a Research Method*. Holt, Rinehart and Winston, Austin, Texas.
- Cultural Mapping Toolkit.
2010 *Cultural Mapping Toolkit*. Creative City Network of Canada and Legacies Now, British Columbia.
- Desmarchelier, C., Gurni, A., Ciccina, G., and Giulietti, A. M.
1996 Ritual and Medicinal Plants of the Ese'ejas of the Amazonian Rainforest (Madre de Dios, Perú). *Journal of Ethnopharmacology* 52(1):45-51.

- Dettwyler, Katherine A.
2011 *Cultural Anthropology & Human Experience*. Waveland Press, Inc., Long Grove, Illinois.
- Diamond, Irene and Gloria F. Orenstein.
1990 *Reweaving the World: The Emergence of Ecofeminism*. Sierra Club Books, San Francisco.
- Equator Initiative
2012 “Ese’ija Native Community of Infierno, Peru. Equator Initiative Case Studies Local Sustainable Development Solutions for People, Nature, and Resilient Communities.” *UNDP* pp. 11.
- Fay, Sidney B.
1947 The Idea of Progress. *The American Historical Review* 52(2):233-246.
- DuBois, Thomas A.
2009 *An Introduction to Shamanism*. Cambridge UP, Cambridge, UK.
- Geertz, Clifford.
1972 *Deep Play: Notes on the Balinese Cockfight*. Bobbs-Merill.
- Godar, J., Tizado, E. J., & Pokorny, B.
2012 Who is Responsible for Deforestation in the Amazon? A Spatially Explicit Analysis along the Transamazon Highway in Brazil. *Forest Ecology and Management* 267:58-73.
- Gould, Stephen J.
1987 The Panda’s Thumb of Technology. *Natural History* 96(1)14.
- Gray, Andrew
1997 *Indigenous Rights and Development: Self-determination in an Amazonian Community*. Bergahn Books, Oxford, UK.
- Guajardo, Miguel, Francisco Guajardo, and Carmen C. E. del.
2008 Transformative Education: Chronicling a Pedagogy for Social Change. *Anthropology and Education Quarterly*. 39(1):3-22.
- Gutierrez-Velez, V. C. H., & DeFries, R.
2013 Annual Multi-Resolution Detection of Land Cover Conversion to Oil Palm in the Peruvian Amazon. *Remote Sensing of Environment* 129.

- Halvaksz, Jamon, and Emily J. Weglian
1998 Anthropology Education Is Never Too Early. *Anthropology News* 39(6):17.
- Heider, Karl G., Pamela A. Reese Blakely, and Thomas D. Blakely.
2007 *Seeing Anthropology: Cultural Anthropology through Film*. Pearson/Allyn and Bacon, Boston, Massachusetts.
- Hicks, David, and Margaret A. Gwynne.
1995 *Readings in Cultural Anthropology to accompany Cultural Anthropology Second Edition*. HarperCollins College, New York.
- Jamal, T. and A. Stronza.
2008 Dwelling with Ecotourism in the Peruvian Amazon: Cultural Relationships in Local-Global Spaces. *Tourist Studies* 8(3): 313-335.
- Johnson, Toni
2010 Peru's Mineral Wealth and Woes. Available <https://www.globalpolicy.org/component/content/article/198-natural-resources/48741-perus-mineral-wealth-and-woes.html>. Accessed 2014 Sept 20.
- Kelly, R. L.
2013 *The Lifeways of Hunter-Gatherers: The Foraging Spectrum*. Cambridge University Press, Cambridge, UK.
- Kheel, Marti.
2008 *Nature Ethics: An Ecofeminist Perspective*. Rowman & Littlefield, Lanham.
- Kottak, Conrad
1989 "General Anthropology Division." *Anthropology News* 30(6)
- Krishnamurti, J.
1991 *On Nature and the Environment*. Harper San Francisco, San Francisco, California.
- Kwan, D., H. Marsh, and S. Delean
2006 Factors Influencing the Sustainability of Customary Dugong Hunting by a Remote Indigenous Community. *Environmental Conservation* 33(3):164-171.

- Lee, Richard B.
1968 What Hunters Do for a Living. In *Man the Hunter*, R. B. Lee and I. Devore, (editors). Pp. 30-48. Aldine, Chicago, Illinois.
- Lepri, Isabella
2006 Identity and Otherness Among the Ese Ejja of Northern Bolivia. *Ethnos* 71(1):67-88.
- Lu, F.
2010 Patterns of Indigenous Resilience in the Amazon: A Case Study of Huaorani Hunting in Ecuador. *Journal of Ecological Anthropology* 14(1):5-21.
- Malhi, Y., Roberts, J. T., Betts, R. A., Killeen, T. J., Li, W., and Nobre, C. A.
2008 Climate Change, Deforestation, and the Fate of the Amazon. *Science* 319(5860):169-172.
- Martin, M. K. and Voorhies, B.
1975 *Female of the Species*. Columbia University Press, New York.
- Moulder, Frances V.
2000 *Social Problems of the Modern World: a Reader*. Wadsworth/Thomson Learning, Belmont, California.
- Ocampo-Raeder, C.
2006 Ese Eja Signatures: A Systematic Assessment of the Effects of Indigenous Resource Management Practices on an Amazonian Forest. *Ph.D. Dissertation Stanford University*.
- Orta-Martínez, M., Finer, M.
2010 Oil Frontiers and Indigenous Resistance in the Peruvian Amazon. *Ecological Economics* 70(2):207-218.
- Pangau-Adam, M., R. Noske, and M. Muehlenberg
2012 Wildmeat or Bushmeat? Subsistence Hunting and Commercial Harvesting in Papua (West New Guinea), Indonesia. *Human Ecology* 40:611-621.
- Peluso, Daniela M.
2003 Ese Eja Epona: Woman's Social Power in Multiple and Hybrid Worlds. *Ph.D. Dissertation, Columbia University*.

- Peluso, D. M., & Alexiades, M. N.
 2005 Indigenous Urbanization and Amazonia's Post-Traditional Environmental Economy. *Traditional Dwellings and Settlements Review* 16(2):7-16.
- Perz, S., Chavez, A. B., Cossio, R., et al.
 2014 Trans-Boundary Infrastructure, Access Connectivity, and Household Land Use in a tri-national frontier in the Southwestern Amazon. *Journal of Land Use Science*, 1-27.
- Peters, C. M., Alexiades, M., & Laird, S. A.
 2012 Train Local Experts to Help Conserve Forests. (Correspondence)(Letter to the Editor). *Nature* 481:7382.
- Peters-Golden, Holly
 2002 *Culture Sketches: Case Studies in Anthropology*. McGraw-Hill Higher Education, Boston, Massachusetts.
- Plumwood, Val.
 1993 *Feminism and the Mastery of Nature*. Routledge, London.
- Pringle, Heather
 2014 The Ancient Roots of the 1%. *Science* 344(6186):822-825.
- Renger, R., Cimetta, A., Pettrgrove, S., and Rogan, S.
 2002 Geographic Information Systems (GIS) as an Evaluation Tool. *American Journal of Evaluation* 23(4):469-479.
- Robinson, J.G. and E. L. Bennett
 2004 Having Your Wildlife and Eating it Too: An Analysis of Hunting Sustainability across Tropical Ecosystems. *Animal Conservation* 7:397-408.
- Robinson, William L, and Eric G. Bolen.
 1984 *Wildlife Ecology and Management*. Macmillan, New York.
- Sahlins, Marshall D.
 1968 Chapters one and two in *Tribesmen*. Foundations of Modern Anthropology Series. Pp. 1-27. Prentice-Hall, Englewood Cliffs, New Jersey.
- Shostak, Marjorie, and Nisa.
 1981 *Nisa, the Life and Words of a !kung Woman*. Harvard University Press, Cambridge, Massachusetts.

Smith, E. A., and M. Wishnie

2000 Conservation and Subsistence in Small-Scale Societies. *Annual Review of Anthropology* 29(1):493-524.

Speth, John D.

1990 The Study of Prehistoric Hunter-Gatherers in the American Southwest: New Insights from Ethnology. In *Perspectives on Southwestern Prehistory*, Paul E. Minnis and Charles L. Redman (editors). Pp. 15-25. Westview Press, Boulder, Colorado.

Spradley, James P, and David W. McCurdy.

1980 *Conformity and Conflict: Readings in Cultural Anthropology*. Little, Brown, Boston, Massachusetts.

Starn, Orin, Iván, Carlos, Degregori, and Robin Kirk.

1995 *The Peru Reader: History, Culture, Politics*. Duke University Press, Durham.

Steward, Julian

1953 Evolution and Process. In *Anthropology Today*, A. L. Kroeber (editor). Pp. 315-316. University of Chicago Press, Chicago, Illinois.

Stronza, Amanda

1999 Learning Both Ways: Lessons from a Corporate and Community Ecotourism Collaboration. *Cultural Survival Quarterly* 23:36-39.

2005 Hosts and Hosts: The Anthropology of Community-based Ecotourism in the Peruvian Amazon. *NAPA Bulletin* 23:170-190.

2008 Through a New Mirror: Reflections on Tourism and Identity in the Amazon. *Human Organization* 67(3):244-257.

Sturgeon, Noël

1997 *Ecofeminist Natures: Race, Gender, Feminist Theory, and Political Action*. Routledge, New York

Swenson, J. J., Carter, C. E., Domec, J.-C., et al.

2011 Gold Mining in the Peruvian Amazon: Global Prices, Deforestation, and Mercury Imports. *Plos One* 6(4).

- Venkatraman, M. and T. Nelson
2008 From Servicescape to Consumptionscape: A Photo-Elicitation Study of Starbucks in the New China. *Journal of International Business Studies* 39(6): 1010-1026.
- Vesilind, P. J.
2002 The Philippines. (Hotspots: Preserving Pieces of a Fragile Biosphere). *National Geographic* 202(1):62+.
- Walbridge, Linda S., and April Kay Sievert.
2003 *Personal Encounters: a Reader in Cultural Anthropology*. McGraw-Hill, Boston, Massachusetts.
- Wang, J., Chagnon, F. J., Williams, E. R., et al.
2009 Impact of Deforestation in the Amazon Basin on Cloud Climatology. *Proceedings of the National Academy of Sciences of the United States of America* 106(10):3670-4.
- Winterhalder, Bruce and Smith, Eric Alden.
1981 *Hunter-Gatherer Foraging Strategies: Ethnographic and Archaeological Analyses*. University of Chicago Press, Chicago, Illinois.

Appendix

LETTERS OF SUPPORT

Letter of Support from the Board of the Ese'eja Nation, 24th August 2013

We, the Ese'eja people of Peru, are strongly eager to begin a Cultural Mapping Project with outside assistance from The Amazon Center for Environmental Education and Research (ACEER), Rocio Martinez, a Peruvian consultant on sustainable development and Jon Cox at the University of Delaware. The three distinct Ese'eja communities of Infierno, Palma Real and Sonene formed the Ese'eja Nation with the purpose of facing the challenges imposed by the dominant Western society who usually break our cultural essence. For this reason in May 2013 we decide to create the Board of Ese'eja Nation to act as one unit when making major decisions affecting our people. Our actions include a strong cultural component whose main mission is to record the history of the Ese'eja, which translates to the "True People" in Ese'eja our spoken language in the linguistic family Tacana. We practice hunting, fishing, and gathering way of life and live in portions of our ancestral lands along the Tambopata, Madre de Dios and Heath Rivers, and others tributaries near Puerto Maldonado, Peru.

Many foreigners including researchers, tourists and profit-making individuals have visited our beautiful land, learned about our way of life, and mined our abundant resources, but usually we do not see the benefits for our people. People have taken away is what they deemed important. We would like to record what we, the Ese'eja, deem important. Our culture and environment are rapidly changing, and we would like to create a tangible account of our history and connection to the forest before our

elders pass on and our indigenous knowledge is fragmented or forgotten. It is our deep desire the Ese'eja knowledge remains forever, passing our unique story from parents to children and the rest of the world.

The Cultural Mapping Project would result in a documentary book and multimedia components based on our indigenous knowledge as the Ese'eja Nation, ancestral home range, traditions and deep connection to the forest. We also want to ensure that Ese'eja schools will be implemented with libraries and those will include all physical and multimedia materials produced by the project to benefit our children and future generations of Ese'eja.

The book and online multimedia components will also share our story with the world. The newly formed Board of Ese'eja nation will lead the Cultural Mapping Team and have the final say and editorial control over what is included in any publications. Our outside collaborators helping us with this endeavor have experience with similar projects, and we believe that their experience will be a valuable asset to us. We would like to work with them because their goals--giving us autonomy and respect--align with our goals.

The collaborators who help us are people and institutions to whom we are deeply grateful. They are the people with whom we will share the mysteries of our Ese'eja culture. We consider their goals coincide with our goals; they share our Ese'eja vision and respect our independence as a Nation and our self-determination as a people. The execution of this project will probably take a year and we are willing to take this time to tell our story and show our world through our eyes.

We also think this Cultural Mapping Project will help empower us with land rights issues and give us a larger voice in politics and be better understood among non-

Ese'ēja people. Indigenous peoples everywhere are facing huge pressures from the outside world. Tourists want us to stay static, or to reinvent the past in order to be "authentic," and the larger world pushes for Westernization. While neither change nor tourism is inherently bad, we, the Ese'ēja Nation, would like to be the ones determining how we change or not. And even if we do change, our heritage will always be important to forming our present identity. That is why we support this Cultural Mapping Project and feel it is important.

Thank you,

Carlos Dejavis Poje & Zenón Yojaje Equiney

President & Secretary of the board of the Ese'ēja Nation in Peru

Letter of Support from the ACEER FOUNDATION, 16th October 2013

As President of the Amazon Center for Environmental Education and Research (ACEER) Foundation, I am pleased to provide this letter of support and commitment to Jon Cox and his team from the University of Delaware associated with their project to conduct a cultural mapping project of the Ese'eja native people of the Peruvian Amazon. The Ese'eja, or True People as they call themselves, are facing tremendous pressures from oil and gas exploration, illegal gold mining that pollutes their ancestral lands with mercury, timbering, and encroaching development due to the new Transoceanic Highway that now bisects the Amazon Basin and crosses through their region. Jon's project is vital to assuring that the Ese'eja preserve their current ways of life, customs, language and traditions. The project will give them a voice. A key component is a strategic community plan for their future...a *Plan de Vida*. This plan will enable the Ese'eja to face the future on their terms and help them better balance their past with their rapidly changing present and future.

ACEER will commit up to \$20,000 in in-kind and/or cash in support of this project. Once the cultural mapping data capture phase of the project is completed, a critical new phase...disseminating the results locally, regionally, nationally and internationally...will commence. The ACEER will be engaged in this crucial phase and bring our extensive network to the project so that results can be disseminated to key local and national decision makers. We will also work with Jon's team to showcase the project and the *Plan de Vida* as a model for other indigenous groups in the region to emulate. Most native peoples, like the Ese'eja, have historically been marginalized and find themselves powerless and voiceless in the face of rapid economic and social changes in their region. The importance of this project to

preserve their culture and give them a voice so they might be active players in the decision making that will influence their lives and the lives of future generations cannot be overstated. That is why ACEER is ready to provide support and to participate as needed to assure the success of the project.

Thank you for the opportunity to write in its support.

Kindest regards,

Roger W. Mustalish, MS, MPH, Ph.D.

President

AMAZON CENTER *for* ENVIRONMENTAL EDUCATION AND RESEARCH FOUNDATION

855 South New Street Sturzebecker Building

West Chester, Pennsylvania 19383

610-738-0477 × 610-436-2860 (FAX) × www.aceer.org

Table of Ese'ija Vowels and Consonants

Phonemic Symbol: Consonants	Letter Used in Text	Phonemic Symbol: Vowels	Letter Used in Text
/b/	b	/a/	a
/tʃ/, /_ /	ch	/e/	e
/d/	d	/i/	i
/h/	h	/o/	o
/x/	j		
/k/	k		
/ʔ/	‘		
/m/	m		
/ñ/	ñ		
/p/	p		
/s/	s		
/ʃ/, /_ /	sh		
/t/	t		
/ts/	ts		
/w/	w		
/y/	y		

(Alexiades 1999:33)